

Nobel prizes

No expense or effort spared

As this year's Nobel prize winners head for the award ceremonies on 10 December — the anniversary of Alfred Nobel's death in 1896 — they will already be used to the fame and aware of the fortune that the prizes bring. What they will not know is just how much time and money has been spent on their selection, reflecting the seriousness with which the whole business is treated in Sweden (and Norway for the peace prize).

And business it is for the Nobel Foundation, which was established under the terms of Nobel's will as the recipient of most of his fortune. The prime purpose of the foundation is to invest its capital in such a way as to finance the five prizes, each of which was SEK 2.175 million this year. Astonishingly, another SEK 10.9 million will have been spent this year "in the work of assessing the candidates", which involves some 200 people, and some SEK 2.5 million on the presentations and associated events.

Alfred Nobel, whose fortune came largely from the invention and exploitation of dynamite and other explosives, stipulated that there should be prizes in physics, chemistry, physiology or medicine, literature, and peace. The economic sciences prize was added in 1968 at the request, and with the financial backing of, the Bank of Sweden, which was then celebrating its 300th anniversary. Stig Ramel, executive director of the Nobel Foundation in Stockholm, says that all other overtures to add to the number of prizes have been, and will continue to be, declined. Were that not the case there might well be Nobel prizes in, for example, mathematics, ballet, music and architecture.

One of Ramel's goals is to restore the original value of the prize, which is currently only about two thirds as valuable as when Röntgen and Van't Hoff, among others, became the first Nobel laureates in 1901. Until a government decision in 1953 the foundation's capital could only be placed in 'safe' securities and had, as a result, lost some two thirds of its value. By the end of 1986, its assets of around SEK 800 million were close to their original value, although they have been dented by recent stock market problems.

But it is the kudos attached to the prize, rather than its monetary value, that remains its major attraction to potential winners. In any case, the prize awarding bodies are at great pains not to err in their judgement and, at least in physics and chemistry, claim never to have become embarrassed by their choices.

The selection procedure begins in the preceding September with a request for nominations. This is sent to, among others, all previous laureates, who tend to excel at

their task and particularly at nominating outside their own field, says Jan Lindsten, who occupies the key post of secretary of the Nobel Committee for Physiology or Medicine at the Karolinska Institute, where he holds a chair in medical genetics.

The 200 or so nominations for each year's physiology or medicine prize are considered by a committee of six which can appoint ten additional *ad hoc* members and can commission external reports on candidates whose field of work lies outside the knowledge of committee members. A 2-3 page assessment of each serious candidate is first prepared, and then 50 are selected for more thorough investigation. At the end of August the 50 are gradually whittled down to the candidates (up to three for each prize) that the committee will recommend. Occasionally a committee is split and makes two alternative recommendations. In any case the final word lies with the 50-strong Nobel Assembly of the Karolinska Institute. A similar procedure, although different in detail, operates for the chemistry and physics prizes. They, however, are awarded by the Royal Swedish Academy of Sciences, whose 275 or so members have the final say once the separate committees for each prize have made their recommendations. The literature prize is handled through the Swedish Academy and the peace prize by a committee appointed by the Norwegian parliament, in accordance with Nobel's wishes.

While there were several occasions in the first 40 years of the prizes when awards

Not the Nobel

THE Nobel Foundation may be unwilling to add to its prizes but the Royal Swedish Academy of Sciences, which awards two of them, is obviously not. For the past five years it has been awarding the Crafoord prize in areas of science that are effectively excluded by Nobel's will. The annual prize, "of a sum exceeding one million Swedish crowns", is awarded by rota to mathematics alternating with astronomy, geosciences, and biosciences (with particular emphasis on ecology). Along with each prize research grants are awarded to Swedish scientists working in the same discipline. In addition, rheumatoid arthritis receives a research grant every third year and a Crafoord prize when progress justifies it.

Both prizes and grants are financed by a fund established in 1980 by a donation from Anna-Greta Crafoord and Holger Crafoord, a Swedish industrialist and founder of AB Gambro, a medical instrument manufacturer. □



Professor Sune Bergström, 1982 Nobel laureate in physiology or medicine, and a Benin bronze, part of the collection of precious objects that Georg von Békésy, 1961 Noble laureate in physiology or medicine, bequeathed to the Nobel Foundation.

were reserved, apparently for lack of an appropriate candidate, this has not happened since the end of the Second World War. Nor could it happen now, says Gösta Ekspong, chairman of the Nobel Committee for Physics and a professor of physics at Stockholm University. Indeed, he admits that there are some worthy candidates who will never get a prize simply because there are not enough to go round. Occasionally the upper limit of three winners a year has made it impossible to award a prize for a particular discovery, he adds.

Those involved with the prizes recognize that such accolades are not wholly beneficial for science but argue that the good aspects outweigh the bad. There is no doubt about their importance to the Swedish science community. Professor Sune Bergström, a 1982 laureate and senior statesman of the community, says that from their beginnings the prizes stimulated Swedish science through the contacts they brought in their wake.

But the extent to which the prizes are taken as a measure of national esteem is deplored. They are not the Olympic Games, says Ramel, recalling, nevertheless, how César Milstein had to be deemed to be Argentinian — his country of origin — until midnight on 10 December 1984 and British — his adopted nationality and place of work — thereafter, in order to allow the relevant ambassadors each to attend part of the ceremonies without overlapping, a diplomatic impossibility at the time. And Ekspong points out the irony of the situation in which prizes that the awarding bodies were at first reluctant to handle, because it seemed unpatriotic that they were not reserved for Swedes, are so subject to national appropriation. □