the Soviet Union to join the SSC—the first step toward a formal diplomatic agreement that would cement a Soviet contribution.

Coming of Age for Mental Health

Behavioral scientists have long complained that they don't get any respect at NIH. But they may not be able to claim exclusion from the nation's citadel of health research for long.

Arrangements are moving apace to incorporate all three institutes of the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) into NIH (see *Science*, 14 June, p. 1484). Psychiatrist Frederick Goodwin, ADAMHA's director and a prime mover behind the reorganization, has been named head of the National Institute of Mental Health (NIMH) by Health and Human Services Secretary Louis Sullivan.

And there's yet more reason for behavioral scientists to celebrate: The number of top-level (nonphysician) behavioral scientists at NIH is now going from zero to two. On 1 July, demographer Wendy Baldwin, formerly director of the Center for Population Research at the National Institute on Child Health and Human Development, was named deputy director of that institute. (The post was vacated by current Surgeon General Antonia Novello.) And psychologist Alan Leshner, who had been expected to become NIMH director before the current upheaval, will be Goodwin's deputy at NIMH.

Congress is expected to sanctify the reorganization plans this year by formally incorporating the research portions of NIMH, the National Institute on Alcohol Abuse and Alcoholism, and the National Institute on Drug Abuse into NIH. Their services programs will stay behind in what remains of ADAMHA, which is to be cumbersomely renamed ADAMHSA.

Investment in the Ivory Tower Infrastructure—three snapshots of expenditures for academic research equipment during the '80s.*

	1982-83	1985-86	1989-90
	(current dollars in millions)		
Engineering	96	174	253
Biological sciences	132	194	246
Physics/astronomy	52	91	102
Chemistry	39	81	84
Environmental sciences	33	55	55
Agricultural sciences	28	34	46
Computer science	20	49	45
Total	400	678	831

Keeping up? *When it comes to research equipment, universities, like Lewis Carroll's Red Queen, feel they are running to stay in place. But that's not the message sent to the National Science Foundation (NSF) by research administrators at 79 universities and medical schools. According to an NSF survey, huge recent expenditures—an 11% increase in real (inflation-adjusted) dollars over the past 3 years—may be paying off. In 1989-90, 50% of a representative sample of research administrators reported that equipment had improved over the past few years, and only 17% saw a decline. They still see a crying need for big-ticket items, though. Sixty-two percent of respondents said they lacked equipment for important experiments. Biologists are best off with only 46% reporting a paucity of equipment.*

*For items costing $500+. Data are weighted to represent institutions that collectively account for more than 90% of academic R&D expenditures. From NSF report, "Academic Research Equipment and Equipment Needs in Selected Science and Engineering Fields: 1989-90."

Superchicken

Move over, Frank Perdue. The pharmaceutical behemoth Merck & Co. has been genetically engineering chickens. Corporate researchers won't reveal details but a European patent disclosure describes the use of retroviral vectors to insert the bovine growth hormone (bGH) gene into fresh, fertile eggs. The result, insiders say, could be highly feed-efficient Macro-Chickens. We're talking about your basic Thanksgiving-type turkey of a chicken.

Merck isn't alone in its pursuit of advanced animal husbandry—nor is the chicken the only quarry. Researchers around the globe are busily trying to use bGH genes—similar to other animals' growth hormone genes—to get more out of pigs, sheep, and cattle. But the work has proved tricky. "You can get too much of a good thing," cautions Iowa State University animal scientist Curtis Youngs.

Youngs is not talking about porcine or bovine elephantiasis, though. When early efforts with pigs resulted in the production of too much hormone, arthritis and other problems appeared. "There is a fine line of how big you want an animal," says Youngs.

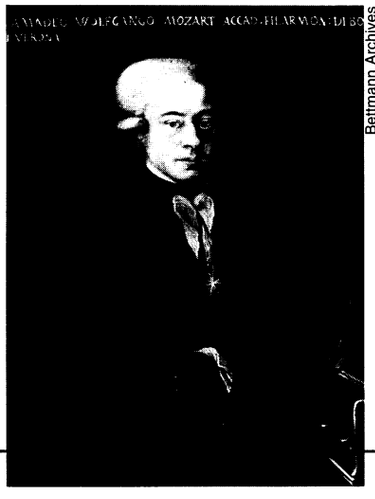
The perils of tinkering with livestock breeding are not confined to genetic engineering. Conventional selective breeding of turkeys has already produced birds so broad-breasted they can barely waddle.

Skullduggery

Just in time for the 200th anniversary of Mozart's death, a group of French researchers claims to have positively identified the skull of the great composer. The commonly held view has been that Mozart's body was lost in a communal grave, but a skull suspected to be his has been reposing in Salzburg's Mozarteum since 1901. Now anthropologist Pierre-François Peuch and colleagues at the University of Provence have concluded that the relic is genuine.

As described in the March/April issue of *Archeology* magazine, the team conducted a thorough study of the artifact, including a reconstruction of the head in clay. The resulting model, say the researchers, conforms to historical information and matches contemporary portraits of the composer. For example, the skull, when superimposed on the portraits, fits in all proportions and in details of the facial features. Furthermore, the wear on the teeth indicates the skull was that of a person who died between 25 and 40—Mozart died at 35. And marks on some of the teeth may have been made by toothpicks, which, the authors say, Mozart was known to have used frequently.

Portrait of Wolfgang Amadeus Mozart



Bettmann Archives

One big surprise from the study is that the composer may not have died from rheumatic fever as was believed, but from chronic bleeding between brain and skull. The researchers identified a fracture on the left temple (the result, they say, of a fall), which may have caused the headaches, weakness, and fainting spells Mozart suffered from.

Mozarteum officials remain unconvinced by Peuch's study. They say that an assessment by their anthropologists and forensic scientists will be published in the near future.