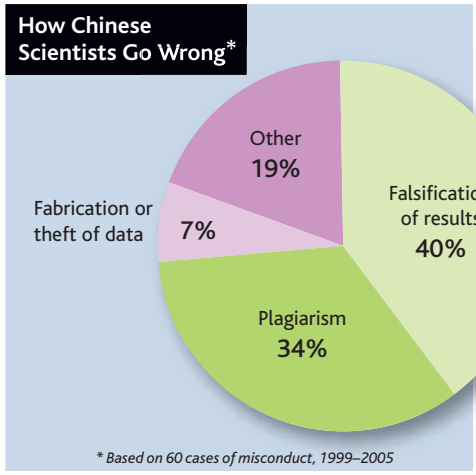
RESEARCH MISCONDUCT

China Science Foundation Takes Action Against 60 Grantees

BEIJING—As part of a campaign to improve ethical behavior among China's rapidly growing scientific community, the country's leading basic research agency has disclosed the names of three scientists being punished for misconduct. In the past 2 years, some 60 scientists funded by the National Science Foundation of China (NSFC) have been found guilty of misconduct, but the Web posting (nsfc.gov.cn) late last month is the first time that any names or institutions have been identified.

"This is a good start to reverse the prevalence of scientific misconduct in China," says Zou Chenglu, a biophysicist at the Chinese Academy of Sciences who follows misconduct issues closely. In December 1998, NSFC formed a 19-member committee of distinguished scientists to investigate allegations of scientific misconduct. Since then, the committee has opened files on 542 cases, most of them flagged by anonymous tipsters. More than 10% of them led to a finding of misconduct, from plagiarism to falsifying data on a grant application (see pie chart, above). Some 40 cases of misconduct were resolved last year without any public announcement. The second round includes 16 cases in which only the general nature of the misconduct was disclosed, plus the three in which detailed information was released.



Assigning blame. Some 60 scientists funded by China's NSF have committed misconduct since 1999, the agency says.

Under a 29-paragraph regulation published in April, the investigations committee has the right to circulate an internal notice of criticism or move it to its public Web site. "The main purpose of making public the scientific misconduct is not to expose the errors but to help the relevant scientists correct faults," says Meng Hui, an official with the Chinese Academy of Sciences who has followed the issue closely. "For this reason, the privacy of those who have committed less serious misdeeds needs to be protected."

In the three cases detailed last month, the scientists have been ordered to reimburse the agency and are barred for up to 4 years from submitting new grant proposals. The agency was the sole body that conducted an investigation, and none of those found guilty elected to appeal the decision. Zou says that the facts must be "irrefutable" for the agency to act.

The first case involves Su Bingyin, a neurologist at the Third Military Medical University in Chongqing. The committee concluded that Su added ghost researchers to his grant proposal, plagiarized material from other applications, and altered biographical information. At Jilin University, Cui Jianwei, a postgraduate student in accounting, was found to have lifted a thesis from the Web site of the University of Pennsylvania's Wharton Business School, translated it into Chinese, and published it in a Chinese magazine. In the third instance, the committee found that Li Guibao, who resigned recently as director of the Water Environment Security Lab at China's Institute of Water Resources and Hydropower Research in Beijing, plagiarized material ▶

RUSSIAN SCIENCE

Government Offers Pay Raise, but Demands Reform

MOSCOW—The Russian government is offering scientists both carrot and stick in its long-delayed plan to reform Russian science, including the bloated and moribund Russian Academy of Sciences (RAS). The carrot is a fivefold boost in a researcher's average monthly paycheck, to $1050. The sticks are the replacement of lifetime jobs with fixed-term contracts, limits on the amount of time scientists can work abroad, and mandatory retirement ages.

Once a shining star of the Soviet system, RAS's fortunes have declined precipitously since the end of the Cold War, leaving many of its hundreds of institutes empty or rented out for office space. Many of the best researchers have emigrated, and some have taken other jobs as inflation has made their RAS salaries worthless. So this month's announcement by the Ministry of Science and Education is being hailed as an important step in restoring the academy's reputation. "The most important thing is Putin's proposal to substantially raise salaries. This is an essential breakthrough," says former science minister Vladimir Fortov.

Although the pay raises evoke the halcyon days of generous Soviet funding, the decision to limit researchers' ability to work abroad, to 3 months per year or less, stirs up less pleasant memories of the old regime. "They will sweeten the pill for researchers by raising their salary but then will tie them tightly to the motherland like peasants in the times of serfdom," says human rights campaigner Alexander Podrabinek. RAS Vice President Gennady Mesyats dismisses such fears, telling a Moscow radio station that "the president told us when he met with us that there will be no return to old times."

Ministry officials say the new policy is simply intended to prevent scientists from earning two salaries. "A researcher must not get lost abroad for most of the time," the ministry's Dmitry Livanov told the ITAR-TASS press agency. Adds Mesyats, "If a person goes to do experiments, for example to CERN or anywhere else, he gets his salary there. We do not pay him for this period."

Once the new salary increases go into effect by 2008, the ministry plans to introduce limited-term contracts and to assess all the staff at least once every 3 years. Highly valued researchers may get 5-year contracts, but only the most outstanding will be given open-ended contracts. "It will be necessary to put strict limitations [on contracts], as a mere increase of a salary may not lead to expected results," Livanov says.

The ministry also wants to cull older staff members by forcing lab chiefs to retire at age 60 and institution directors at 65. But there will be exceptions, says another RAS vice president, Valery Kozlov. "We do not plan to fire researchers at the pension age if they actively participate in the scientific life. But if a young researcher has lost interest in science, he will be laid off."

–ANDREY ALLAKHVERDOV AND VLADIMIR POKROVSKY

Andrey Allakhverdov and Vladimir Pokrovsky are writers in Moscow.

SOURCE: NATIONAL SCIENCE FOUNDATION OF CHINA

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from another grant proposal. All three declined comment.

NSFC was founded in 1986 and has an annual budget of $332 million. Last year, it received more than 40,000 applications and made about 8000 awards, with an average annual grant size of $9500 for single investigators. Shen Wenqing, deputy director of NSFC, says the agency is also on guard against unethical conduct among its reviewers and grants administrators as well as its grantees.

–GONG YIDONG

Gong Yidong writes for *China Features* in Beijing.

PEDIATRIC MEDICINE

Europe Follows U.S. in Testing Drugs for Children

BARCELONA, SPAIN—The European Parliament approved a law last week that will compel drug companies to investigate whether new drugs will benefit children and submit results for consideration with drug applications. Researchers hope this will boost research into pediatric drugs and lead to a more formal drug authorization process.

Between 50% and 90% of drugs used by adults have never been tested or licensed for use in children (from newborns to 18-year-olds). The result is that physicians treating the 100 million children in the European Union often prescribe off-label products or unauthorized drugs and so risk ineffectiveness or adverse reactions. The new law, passed on 7 September, aims to create a more rational approach; it mirrors the United States's "pediatric rule," which encourages clinical trials in children and has stimulated the development of drugs designed specifically for children.

Central to the new European legislation will be a 35-member advisory committee. Before any new drug can be approved, a company must submit a pediatric investigation plan to this Pediatric Committee and present the outcome of the research with any subsequent drug application. (The committee can approve waivers or deferrals of pediatric studies if, for example, the disease in question only affects adults.) The committee, administered by the European Medicines Agency (EMEA), will be independent of industry. "The critical piece in the jigsaw for the new regulation is the pediatric advisory committee to the EMEA. … I hope we get an expert committee of people with relevant skills," says Bruce Morland, chair of the United Kingdom Children's Cancer Study group. The new regulation also calls for a network of clinical researchers and research centers, a database of ongoing and terminated pediatric drug trials, and a free scientific advice service for industry provided by EMEA.

A child-centered approach "was absolutely necessary," says clinical pharmacologist Josep-Maria Arnau of Vall d'Hebró University Hospital in Barcelona, Spain. Pediatric pharmacologist Gerard Pons of the René Descartes University in Paris says that the regulation "is very important not only in terms of public health but also in terms of economy, as an E.U. network for research of children's drugs should attract drug manufacturers to the E.U."

Get 'em young. New European legislation will encourage drug companies to research new drugs for children.

The new law, expected to get final approval from the European Council this year, also calls for the E.U. to provide funding to research drugs that are not patent protected. This Medicines Investigation for the Children of Europe program will aim to get off-patent drugs for children authorized, normally a difficult task because of the slim profits.

As in the United States, drug companies can win a 6-month extension of their patent protection if they have carried out a pediatric investigation plan. The law "is a key opportunity for Europe's children and for Europe's pharmaceutical science base," says Brian Ager, director general of the European Federation of Pharmaceutical Industries and Associations. –XAVIER BOSCH

Xavier Bosch is a science writer in Barcelona, Spain.

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ScienceScope

Audit Slams French Research

PARIS—France's system of managing research requires "urgent, significant reform," says a 170-page draft report by an independent audit authority. According to an article in *Le Figaro*, the document deplores poor accounting rules, inadequate evaluation, and insufficiently coordinated resources to compete internationally.

A group of university presidents welcomed proposals in the report to rectify the problems, including a call for greater university independence. But Cochin Institute biologist Alain Trautmann, spokesperson for the long-running researcher protest movement (*Science*, 16 April 2004, p. 368), says more autonomy for universities without getting rid of rife cronyism "would be a catastrophe."

–BARBARA CASASSUS

U.S. to Bar Caviar

Nearly 5 years after activists first petitioned the U.S. Fish and Wildlife Service to stop importing beluga sturgeon from the Caspian Sea, the agency has decided to do just that. The countries bordering the sea have failed to present a plan to stop the 200-million-year-old fish's decline, due to overfishing, in the past 2 decades (see p. 1806). The United States has been the biggest importer of beluga caviar, which can fetch more than $6600 a kilogram. "The U.S. will set an important example," says Lisa Speer of the U.S. environmental coalition Caviar Emptor.

–CHRISTOPHER PALA

EPA Revises Pesticide Human Testing Rules

The Environmental Protection Agency (EPA) last week released a draft rule for considering toxicity studies in which volunteers are intentionally dosed with pesticides.

In July, lawmakers criticized an early version of the rules as ethically lax (*Science*, 8 July, p. 232), and a spending bill ordered the agency to modify the rules. The new rule, if adopted, would bar the use of any dosing studies of pregnant women or children and create a Human Studies Review Board to vet research proposals. CropLife America, a pesticide trade group, welcomed the rule, but Richard Wiles of the Environmental Working Group, an advocacy organization in Washington, D.C., worries that it won't bar studies in which children are exposed to pesticides, such as CHEERS, which EPA spiked in April due to congressional concerns. The rule is open for comment for 90 days, and EPA hopes to finalize it by Congress's January deadline. –ERIK STOKSTAD

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