

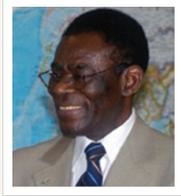
The Yearbook

We list the key people who made headlines this year, either for public reports that overstretched their reach or for papers that almost never saw the light of day.



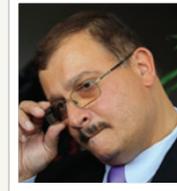
Hisashi Moriguchi
Least likely to flex his muscle

Less than a week after Kyoto University's Shinya Yamanaka won the Nobel Prize for his work on induced pluripotent stem (iPS) cells, Japanese stem cell research was back in the headlines after Hisashi Moriguchi, a visiting researcher at the University of Tokyo, claimed to have used cardiac muscle cells derived from iPS cells to successfully repair heart damage in six people. He also professed affiliations with Harvard Medical School and the Massachusetts General Hospital, connections that the Boston-area institutions denied. Moriguchi later admitted that most of his claims were false, although he maintained that the procedure had taken place with a single patient at an undisclosed Boston hospital in mid-2011. The University of Tokyo quickly fired Moriguchi for damaging the university's credibility.



Teodoro Obiang Nguema Mbasogo
Most likely to spur a prize-winning controversy

Over the objections of many Western nations, a science prize first proposed in 2008 by Africa's longest-ruling dictator was finally given out this year after 33 of the 58 members of the United Nations Educational, Scientific and Cultural Organization's executive board decided to go ahead with the award. Teodoro Obiang Nguema Mbasogo, the president of Equatorial Guinea who put up \$3 million over five years for the prize, and his family are the subject of multiple foreign investigations into corruption and human rights abuses. Three scientists from South Africa, Egypt and Mexico won the inaugural UNESCO-Equatorial Guinea International Prize for Research in the Life Sciences in July.

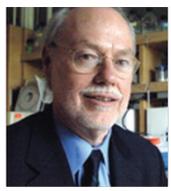


Gilles-Eric Seralini
Most likely to get an earful

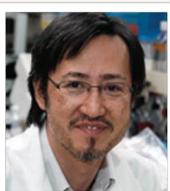
Opponents of genetically engineered crops jumped on the results of a paper published in September by Gilles-Eric Seralini and his team at the University of Caen in France that reported that rats fed genetically modified corn developed tumors more frequently than rats on a non-genetically-modified maize diet. The ensuing public uproar triggered European and French regulatory bodies to create task forces to review the paper. Within a month, all the oversight agencies came to essentially the same conclusion: the study used too few rats, insufficient controls, poor statistical analyses and flawed methodologies. French authorities called for the study to be repeated with improved protocols.



Alfred Gilman and Phillip Sharp
Most Nobel exit



The Texas-sized effort to battle cancer was delivered a major blow this year when more than 30 members of the state-funded initiative's scientific review council resigned *en masse* over concerns about the peer-review process. Leading the exodus were the Nobelists Alfred Gilman and Phillip Sharp. Both men stepped down from leadership roles—Gilman from the chief scientific officer position and Sharp from the chairmanship of the scientific review council—at the \$3 billion, Austin-based Cancer Prevention and Research Institute of Texas (CPRIT) in protest over a slate of grants that went unfunded, despite approval by peer reviewers, as well as a \$20 million award given to Rice University and the MD Anderson Cancer Center, both in Houston, that was approved by CPRIT's commercialization review council without undergoing scientific peer review. More than 30 other scientific reviewers followed them out the door.



Yoshihiro Kawaoka and Ron Fouchier
Most likely to ferret out naysayers



Two scientists, Yoshihiro Kawaoka of the University of Wisconsin–Madison and Ron Fouchier of Erasmus Medical Centre in Rotterdam, the Netherlands, triggered one of the most intense bioethical debates in years after each virologist's lab independently made the H5N1 avian influenza virus highly transmissible among ferrets. The studies describing the work were held up in limbo for months while the US National Science Advisory Board for Biosecurity debated whether the benefits of publication outweighed the risks of potential misuse. The journals *Science* and *Nature* eventually published the papers, but not before the US government established a new policy that requires federal funding agencies to systematically review the potential harm of research involving 15 pathogens and toxins that could be used for bioterrorism, including the bird flu.



Nancy Brinker and Elizabeth Thompson
Least likely to pass a 'screen' test



In February, after a three-day public outcry, Susan G. Komen for the Cure, the world's largest breast cancer-focused nonprofit, reversed its prior decision to cut funding for breast cancer screening and education programs at Planned Parenthood. However, the fallout from the decision didn't end there. Fundraising has suffered ever since, and participation in the organization's signature Race for the Cure events was down by as much as 30% from last year. Meanwhile, at least half a dozen high-ranking executives resigned in the aftermath of the Planned Parenthood debacle, including the organization's president Elizabeth Thompson and chief executive Nancy Brinker. Brinker, who founded the organization in 1982, two years after her sister, Susan G. Komen, died of breast cancer, said she would move to a new management role as chair of the Komen Board Executive Committee.