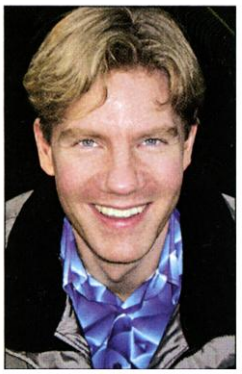
[himself]." Far from being simpletons in their mating decisions, guppy females seem judicious. And that, Rodd says, should be a warning sign to other researchers seeking to understand female choice: "It's more complicated than we thought—even in guppies."

–VIRGINIA MORELL

DENMARK

Greens See Red Over Revisionist's New Job

COPENHAGEN—Has the Danish government put a fox in charge of the henhouse? That's what many environmental researchers are wondering after last week's appointment of Bjørn Lomborg, author of the controversial book *The Skeptical Environmentalist*, as director of Denmark's new national Institute for Environment Evaluation.



Lightning rod. Bjørn Lomborg's new job has sparked furor.

Denmark's right-wing coalition government has created the institute to assess the effectiveness of environmental protection spending. Many researchers and activists worry that Lomborg's thesis—that most environmental problems are wildly overstated—will color the institute's thinking. "He is widely distrusted among the people whose research he will be dealing with," says environmental biologist and biodiversity specialist Peder Agger of the University of Roskilde. But Lomborg says that researchers are missing the point of the new institute: "It's about getting the most for the money we spend."

Lomborg, a political scientist on leave from Aarhus University, created a furor last year by arguing in his book that indicators in areas from biodiversity to water conservation show that the planet is far better off than the public thinks. *The Economist*, for example, has praised him for questioning the validity of what Lomborg has called "the alarmist litany."

Such compliments drive many environmental researchers crazy. "He's a media phenomenon spreading misinformation," contends Agger. A series of essays in the January issue of *Scientific American* raises several questions about Lomborg's analyses, which are also under attack from the Union of Concerned Scientists. According to Stuart Pimm, an ecologist at Columbia University in New York City, "very serious environmental researchers have gone through chapters and found that he practically doesn't get a single point right."

The Danish Committee on Scientific Dishonesty is investigating a complaint from Danish biologist Kåre Fog that Lomborg has knowingly distorted the research he analyzes in his book. "He systematically leaves out any data and prognoses that are not in line with his views," Fog says. The complaint, Lomborg replies, "has no merit whatsoever."

Given Lomborg's public views, many observers view his appointment as a declaration of war on the environment. Socialist Jørn Jespersen predicts that Denmark will lose its credibility in global environmental discussions because "appointing a man with no scientific background makes us a laughingstock." Not surprisingly, Lomborg disagrees. In fact, he predicts that the institute "could be very powerful if politicians listen to us."

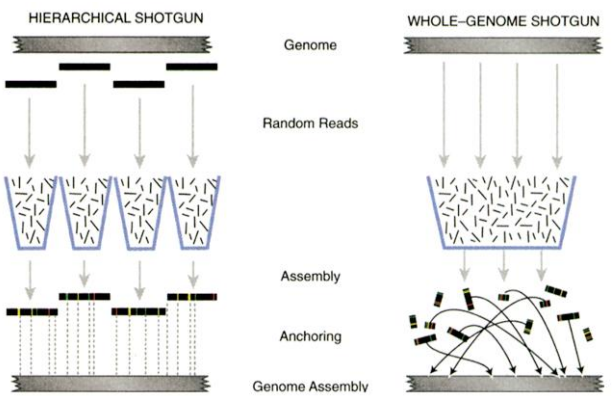
–LONE FRANK

Lone Frank is a science writer in Copenhagen.

GENOMICS

Taking Aim at Celera's Shotgun

The genome wars seemed to have subsided—until last week, that is, when one side took a belated swipe at the other's credibility. In a paper published in the 5 March online *Proceedings of the National Academy of Sciences* (*PNAS*), three leaders of the publicly funded Human Genome Project (HGP) assert that what appeared to be a dead-heat race to sequence the genome was actually nothing of the sort. Celera Genomics, the authors argue, broke down information from the public database into patterns that were easy to reassemble. The company's public relations machine then sold the effort as a triumph of the whole-genome shotgun approach, the authors add, making it appear different from the public frame-by-frame reading. (The two draft sequences were published in February 2001, Celera's in *Science* and HGP's in *Nature*.)



And the scrimmage continues. Scientists are still battling over whether Celera's sequencing approach (right) is superior to the public consortium's (left).

Celera hotly denies the charges. "They say that we copied their answer, and that's completely false," says Mark Adams, vice president for genome programs at the company, located in Rockville, Maryland. Alternating between despondence and frustration, Adams professes that "I'd really like to see [the rivalry] end."

The allegations come from Robert Waterston of Washington University in St. Louis, Missouri; Eric Lander of the Whitehead Institute's Center for Genome Research in Cambridge, Massachusetts; and John Sulston of the Wellcome Trust Sanger Institute in Cambridge, U.K. In their analysis, Waterston and his colleagues sought to mimic Celera's breakdown and reconstruction of the HGP data. Celera chopped up stretches of public data into short strands of sequence, Adams says, both to catch errors and to augment its own sequence data. The *PNAS* paper, on the other hand, argues that Celera disassembled, or "shredded," the public data in such a way that it automatically reassembled into correct order—in other words, they charge, Celera added little but took the credit for a lot.

Using chromosome 22 as an example, the critics simulated various shreddings of the HGP data. One, which they believed resembled Celera's disassembly pattern, yielded on reassembly a sequence essentially identical to the original. Celera's approach, they conclude, "implicitly preserves the underlying assembly information." The results also suggest that the true whole-genome shotgun approach—which the three say Celera did not perform as claimed—may be problematic for lengthy sequences.

The paper is rather an "arbitrary deconstruction of other people's work" that does not advance the science, says Richard Gibbs of Baylor College of Medicine in Houston. (Gibbs took part in the HGP and is now collaborating with Celera on the rat genome.) He adds that "the public consortium as a group" would not have signed off on this paper.

But both Nicholas Cozzarelli, *PNAS*'s editor-in-chief, and Philip Green of the University of Washington, Seattle, who, like Celera, wrote a commentary that will accompany the paper in an upcoming print edition, vigorously defend the paper's value. "It is important to correct the historical record," says Green, given the enormous importance of a sequenced human genome. Yet even Green suspects that "the Nobel Prize is sort of underlying all these [controversies]." After all, "only three people can get it."

–JENNIFER COUZIN

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