

John A. Blakeman
2412 Scheid Road,
Huron, OH 44839, USA

AIDS Politics

I was amazed but not amused by Jon Cohen's perception of the current state of HIV (human immunodeficiency virus) research (Special report: AIDS, "The changing of the guard," 28 June, p. 1876). For example, the "Heavy hitters 1993-95" list purporting to show the emergence of some new wave is taken from an article entitled, "AIDS: NIH stands out" (1). The *Science* list is made up of several individuals who usually, but not invariably, publish as a group. A summary impact score (citation per paper) for these groups would be

Laboratory of Immunoregulation, National Institute of Allergies and Infectious Diseases (Orenstein + Pantaleo + Fauci)	University of Alabama, Birmingham (Shaw + Saag + Hahn)	Aaron Diamond AIDS Res. Ctr. (Ho + Cao + Moore)
73.01	54.51	43.43

and Robert Gallo's figures were not even included in this list. In this case of statistics of scientific esteem, readers should recall a statement paraphrased from Eugene McCarthy on football coaches, that one has to be smart enough to understand the principle, but not smart enough to lose interest.

HIV disease and its ultimate symptom, AIDS, is a tragedy that transcends politics and factions. A proper sociopolitical history of HIV research would reveal that coteries and cabals in this field are neither new nor have they been a particular source of original ideas or novel approaches for dealing with the disease. More important, factionalism is not the best way to produce new scientific concepts but is a symptom of lack of direction. Assigning the categories "old guard" or "new guard" does little for creative unity in disease research, whether they are accurate or not.

Cecil H. Fox
Molecular Histology, Inc.,
18536 Office Park Drive,
Gaithersburg, MD 20879, USA
E-mail: jwgibbs@us.net

References

1. *Sci. Watch* 7, 1 (May/June 1996).

Schrödinger's Cat at Hand

When the Schrödinger cat paradox was first proposed in 1935, it was difficult to envision an experimental system in which to model Schrödinger's experiment. But C. Monroe *et al.* describe such a system in their research article "A 'Schrödinger cat' superposition state of an atom" (24 May, p. 1131). In an accompanying Research News article (24 May, p. 1101), Gary Taubes writes

... Erwin Schrödinger described a cat shut up in what he called a "diabolical device": a closed box also containing a small amount of a radioactive substance. Over the course of an hour, the radioactive substance has a 50-50 chance of decaying. If it does, the decay is detected by a counter, which shatters a flask of deadly acid, killing the cat. If it doesn't, the cat lives.

But for the experiment to be a true paradox, the box must contain only one radioactive atom, as specified by Schrödinger. If there are numerous atoms in the box, it is a statistical certainty that at least one atom (but we cannot know which one) will decay in the course of the experiment, and the unfortunate cat will undoubtedly be killed. If, on the other hand, there is only one or very few atoms in the

Do you always get a reaction when converting RNA into single-stranded cDNA templates for RT-PCR? Patrik does—thanks to a revolutionary polymeric bead that makes these critical conversions for him in new Ready-To-Go™ Kits.

The kits utilize the new Ready-To-Go bead that avoids many potential errors common to handling aqueous reagents.

That's because the "bead" is a complete,

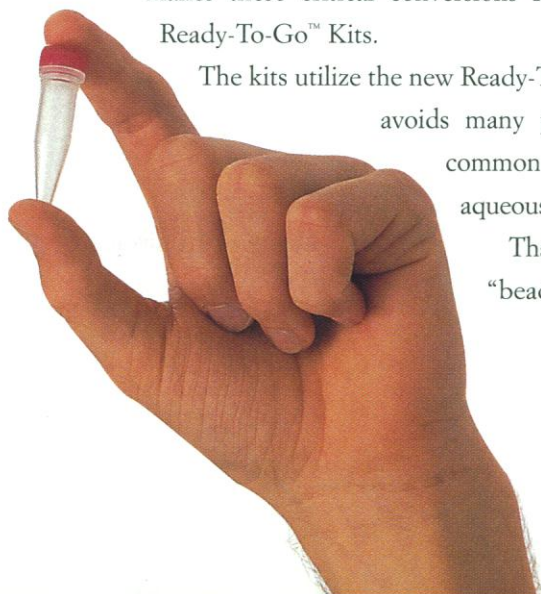
pre-formulated, single-dose reaction—so there's little chance of your PCR templates becoming contaminated.

Just add your sample to the ambient-stable bead and watch it dissolve—that's all the pipetting required. In under a minute, you can begin full-length first-strand cDNA synthesis. This new approach to producing cDNA is only available from Pharmacia Biotech.

Just call us at 1 (800) 526 3593 in the United States, or +46 18 16 5011 from the rest of the world, for more information. Ask about the bead that never fails to give you a reaction.



Circle No. 36 on Readers' Service Card



Nanosphere™ Size Standards. Certified in billionths of a meter by Duke Scientific

Nanosphere Size Standards are calibrated in billionths of a meter (nanometers) and are available in 22 sizes from 21 to 900nm—all traceable to the National Bureau of Standards. Nanospheres are part of our complete line of spherical particles from 0.02 to 2000 micrometers in diameter. They are used as standards for instrument calibration, quality control, filter checking, and in numerous biotechnology applications. At Duke Scientific—established in 1971—we have the expertise and resources to meet any of your requirements for microspheres and particles. Call us today for information.



2463 Faber Place, P.O. Box 50005, Palo Alto, CA 94303, Toll Free (800) 334-3883, in CA (415) 424-1177, Fax (415) 424-1158

Circle No. 2 on Readers' Service Card



Corrections and Clarifications

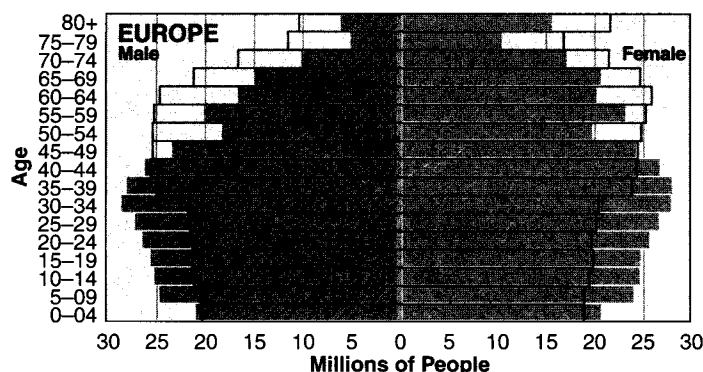
In the letter "Risks from low doses of radiation: Continued" by Marvin Goldman (2 Aug., p. 562), the reference in the last paragraph on page 563 should have been "(3)" not "(2)."

The WWW address for Pedro at the end of note 3 in the letter "Not the 'Dark Ages'" by W. C. Barker and R. S. Ledley (12 July, p. 165) was incorrect. The correct address is http://www.public.iastate.edu/~pedro/rt_1.html

The WWW address for the document of the Council of Tobacco Research listed in the response by Jon Cohen (Letters, 12 July, p. 167) was incorrect. The correct address is <http://galen.library.ucsf.edu/tobacco/docs/html/1916.01/1916.01.1.html>

In the references (p. 16) of the letter by Darwin R. Labarthe about "Battling heart disease" (5 July, p. 15), references 3, 4, and 5 should have been listed as one reference, "3," and reference 6 should have been listed as "4." The numbers 1–4 as they appeared in the text were correct.

The figure (p. 47) showing the age distribution of the population of Europe (News, C. Holden, "New populations of old add to poor nations' burdens," 5 July, p. 46) was incorrect. The correct figure is shown below.



box, we will not know whether the cat is dead or alive.

András Málnási Csizmadia
Department of Biochemistry,
Loránd Eötvös University,
Budapest, H-1088, Hungary
E-mail: malna@ludens.elte.hu

Achilles J. Sanchez
Department of Biology, Brandeis University,
Waltham, MA 02254-9110, USA

As a naïve molecular biologist, I am perplexed by one facet of the problem of Schrödinger's cat as it is usually presented. Why can't the cat be considered an observer and therefore remove the uncertainty about its own life or death status?

Randy Morse
State University of New York,
Wadsworth Center,
Albany, NY 12201-2002, USA

My 12-year-old daughter Phoebe is a student of quantum paradoxes, but she was concerned about an error in the illustration accompanying the Research News article with regard to feline anatomy. Presumably, even Schrödinger's cat would have foreleg "elbows," not "knees."

Barbara A. B. Seiders
Pacific Northwest National Laboratory,
Richland, WA 99352, USA

The title of the Research News article "Schizophrenic atom doubles as Schrödinger's cat—or kitten" perpetuates a misconception about schizophrenia—which is nothing like split personality—and trivializes a potentially disabling mental disorder.

Paul C. S. Hoaken
Department of Psychiatry,
Queen's University,
Kingston, Ontario K7L 5G2, Canada

"Kitten," as used by Taubes, seems needlessly macroscopic as a metaphor for a single trapped atom. How about "Schrödinger's furball"?

Andrew Ahlgren
University of Minnesota,
Minneapolis, MN 55455, USA

Monkey Business

Presidential hopeful Pat Buchanan's assertion (described in News & Comment, 26 July, p. 421) that he personally is not descended from monkeys explains a lot to those of us who are from this planet.

Gerald L. Epstein
6008 Anniston Road,
Bethesda, MD 20817, USA