No Prize for the Wrights

THERE ARE MANY DESERVING DISCOVERIES and inventions unrecognized by the award of a Nobel Prize, as noted by David Malakoff (News Focus, "Prizewinners, no—but not losers," 12 Oct., p. 292). One of the most significant omissions not mentioned by Malakoff is sustained, controlled, powered human flight. The Nobel Prize awards began in 1901. The Wright brothers made the first powered flight in 1903.

Orville and Wilbur Wright each received eight nominations for the Physics Prize in 1909. Among their nominators were Poincaré and Mittag-Leffler (*1*). The prize went to Marconi and Braun, so one could hardly argue that there was any prejudice against inventions, particularly since the 1912 award went to Dalén for improving lighthouse illumination. The brothers were again nominated in 1913, although Wilbur had died on 30 May 1912 and there are no posthumous awards.

Orville Wright (black jacket and cap) is testing the struts on the Flyer before its first endurance flight on 27 July 1909.

ROBERT LANGRIDGE
60 The Crescent, Berkeley, CA 94708–1702, USA.
E-mail: boblangr@socrates.berkeley.edu

References and Notes

1. E. Crawford, J. L. Heilbron, R. Ullrich, *The Nobel Population1901-1937: A Census of the Nominators and Nominees for the Prizes in Physics and Chemistry* (Univ. of California, Berkeley, and Uppsala Univ., Uppsala, Sweden, 1987).

NAS Cloning Hearing Disappoints Participants

THE NATIONAL ACADEMY OF SCIENCES (NAS) is arguably the most important scientific association in the United States. For decades it has been a key source of sound policy advice and solidly grounded opinion on matters pertaining to science, medicine, and engineering to the federal government. Early in August the NAS held a hearing on cloning. The report that will result from that hearing (due by the end of 2001) will no doubt receive keen attention from Congress. How did it happen that on a topic of crucial currency the NAS saw fit to welcome as equals into its ranks a group with so little scientific credibility? And why has the scientific community had so little to say about this puzzling collapse of standards with respect to who is asked to speak publicly on matters of science and medicine?

The group in question is Brigitte Boisselier, Panayiotis Zavos, and Severino Antinori. Boisselier does not have a single Medline or Biosis publication. None of them has produced any Medline or Biosis indexed publications on cloning. None of the three has done any animal experimentation published in any Medline or Biosis indexed publications that would permit them to offer relevant information about the feasibility of cloning (for example, the embryological problems with the reprogramming of gene expression or attempts at animal cloning).

When the leading organization of scientists and physicians in the United States invites unqualified persons to sit as equals meriting the same consideration due to those who actually have conducted responsible research on the topic at issue, and when, as happened at the hearing, those on the fringe are permitted to deprecate the work of those who actually have published research on cloning, then the distinctions between science, pseudoscience, and nonscience (if not nonsense) are eroded. No doubt the testimony of the real experts who were present during the hearing will lead, in the published report, to a resounding condemnation of the claims and assertions of Zavos, Boisselier, and Antinori. But the decision to treat these people as scientific equals in order to hear from them was wrong.

Perhaps the greatest damage that can occur when the scientific community fails to clearly demarcate real science from nonscience is that bad public policy results. Already bills are moving through Congress, in state legislatures, and in international organizations to ban or prohibit all forms of cloning with human DNA, whether for reproduction or any other scientific purpose. Perhaps it is prudent to enact such bans, but there can be little doubt that the rush to enact them is being fueled by the perception that legitimate scientists and doctors are going to clone a human being in the near future.

In a democracy, public policy must be based on more than the views of scientists, even on matters of medicine and science. But the voices of scientists must be heard by those responsible for making policy. What is happening in the discussion of cloning in American public policy, as the NAS panel made sadly evident, is that the scientific community has become too lax about making sure that the public and policy-makers can hear them clearly.

DAVID MAGNUS, ARTHUR CAPLAN*
Center for Bioethics, University of Pennsylvania, Philadelphia, PA 19104, USA.
E-mail: magnus@mail.med.upenn.edu, and caplan@mail.upenn.edu
*Director of the Center for Bioethics

Amplifying Importance of New Research in Peru

THE REPORT BY R. SHADY SOLIS, J. HAAS, and W. Creamer on the early monumental Peruvian site of Caral (Supe Valley) provides important data about early complex society in the Andes ("Dating Caral, a preceramic site in the Supe Valley on the central coast of Peru," 27 Apr., p. 723). However, the short format of *Science* reports did not permit the authors to place the findings in the context of prior research, leading to misrepresentations in media reports, including the accompanying News of the Week article by H. Pringle ("The first urban center in the Americas," p. 621).

Although it is the largest, most complex Late Preceramic site known in coastal Peru, Caral is not the earliest site with monumental architecture and/or remains of domesticated plants (*1*). Near the shore in the Supe Valley, Aspero covers more

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