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**Response:** After *Science* went to press, Rutter's attorney called to correct Rutter's suggestion that the 1977 cloning work could be verified by examining the original pMB9 clones, said to be on deposit at the ATCC. Rutter later explained in a note to *Science* that no such clones exist:

After our conversation, I thought I should check on this point to be sure. Having looked into the matter further, I learned that, in fact, we had combined two pMB9 clones, pAU-1 and pAU-2, into a composite subclone and had used pBR322 as a vector, since this work was done after pBR322 had been certified [as safe] by NIH. Thus, the deposit made with the ATCC was this subclone in the pBR322 vector.

This indicates how rapidly Rutter and his colleagues were working in the spring of 1977. In January, they put the insulin gene into a nonpermitted pBR322 vector, and in March they destroyed that material after being told its use was not allowed by NIH. They recloned the gene into a permitted vector (pMB9), publishing a paper on it in *Science* (17 June 1977, p. 1313). But in connection with a May patent application, they recloned the insulin into the (then permitted) pBR322 vector, which they deposited at the ATCC. Thus, the vector on deposit is not from the experiment described in *Science* and cannot be used to answer lingering questions about it.—**Eliot Marshall**

## Troubling Matters

In his profile of Herbert Benson, founder of Harvard's Mind/Body Medical Institute (Research News, 18 Apr., p. 357), Wade Roush notes that "there have been critics who call Benson a better showman than a scientist." We see Benson as a publicizer of therapeutic claims that appear not to be supported by the data.

For example, according to Claudia Wallis (1), Benson has said that, by routinely eliciting the relaxation response, "75% of insomniacs begin to sleep normally, 35% of infertile women become pregnant and 34% of chronic-pain sufferers reduce their use of painkilling drugs"; Benson himself essentially repeats these claims in the 1996-1997 brochure advertising his continuing medical education course "Spirituality and Healing in Medicine-II" sponsored by Harvard Medical School. But what do the data show?

Concerning insomnia, the relevant paper (2) explicitly states that it is not possible to say whether the relaxation response contributes to the therapy, because a multifactor approach was used. In a separate study involving small numbers of patients (10 test versus 10 control) and labeled as "preliminary" (3), evidence of a small contribution of the relaxation response is made problematic by large standard errors of the means.

Concerning infertility, the relevant paper (4) disavows Benson's claim. The paper states, "the conception rate may be within the normal range for women who aggressively seek treatment from experienced infertility specialists" (4, p. 147), which is what most of the patients were doing in addition to receiving the behavioral treatment.

Concerning chronic pain, again the relevant paper (5) explicitly states that it is not possible to say whether the relaxation response contributes to the therapy because they used a multifactor approach. And *nothing at all* is said about any reduction in the use of painkilling drugs.

We are troubled by the discrepancies between the claims and the data.

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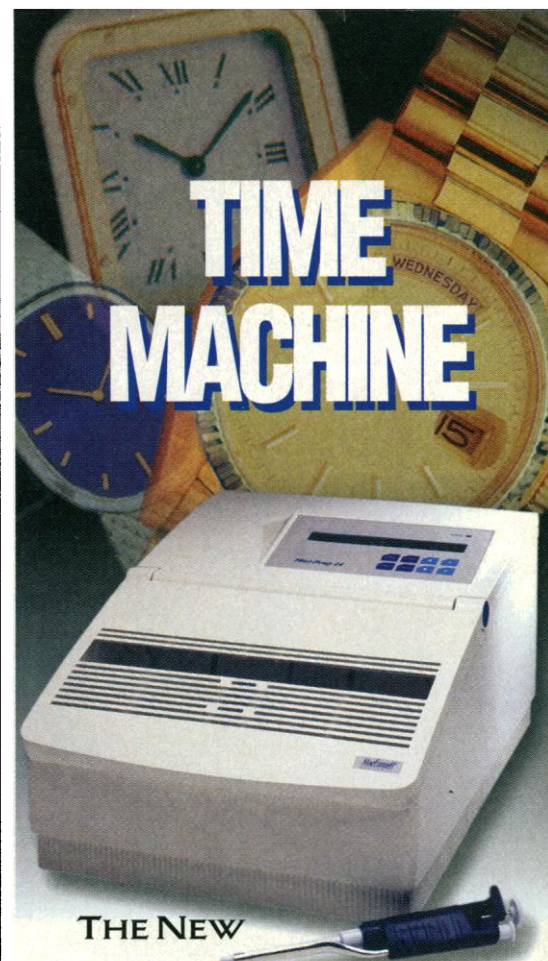
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## References

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5. M. Caudill, R. Schnable, P. Zuttermeister, H. Benson, R. Friedman, *Clin. J. Pain* 7, 305 (1991).

## Letters to the Editor

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