

# THE FIRST WORD/

## CONCORDANCE DISCORD

*"'Twould have been foolish to quarrel about an idee," March cried, as he resumed his meal, "and more like lawyers in the towns, than like sensible men in the woods. They tell me, Deerslayer, much ill blood grows out of ideas, among the people in the lower counties, and they sometimes get to extremities upon them."*

—The Deerslayer

**T**he thought could cover the current bickering about ideas for developing the anti-cancer drug taxol, which is now derived from the forest (see Stephen M. Edgington's, "Taxol—Out of the Woods"). Or we could be talking about the Pyrrhic showdown between centocor and Xoma—call it the *Shoot-Out at the PTO-Corral* (see Jeffrey Fox's and Mimi Bluestone's "Centocor and Xoma Square Off").

But we were actually thinking about *A Preliminary Edition of the Unpublished Dead Sea Scrolls*, a version of the ancient Hebrew and Aramaic religious texts published by the Biblical Archaeological Society (Washington, DC). Two scholars, Ben Zion Wacholder and Martin G. Abegg of Hebrew Union College (Cincinnati, OH), restive at the official monopoly's four-and-a-half decade delay in releasing the Scrolls, decided to do something about it. They programmed a desk-top computer named Rabbi (probably related by marriage to Abulafia, the solid-state paranoiac in Umberto Eco's *Foucault's Pendulum*) to grind through a recently, and grudgingly, released concordance—a listing (in context) of every appearance of every word in the Scrolls. The Scrolls committee compiled this concordance more than thirty years ago, but kept it a closely held secret. Rabbi cross-referenced the concordance, following a trail of memory pointers as faithfully as a bloodhound follows a scent. Finally, Wacholder and Abegg had all the words back in their proper order, like pearls restrung after being spilled on the floor.

The Scrolls monopoly is incensed. "What else can one call it but stealing?" one of the select scholars has been quoted as saying.

Hogwash and soul butter, as Huckleberry Finn would have said. But what interests and pleases us about the affair (other than the joy of seeing an entrenched elite get its comeuppance) is this: Wacholder and Abegg have done precisely what the generalists and physical mappers are trying to do—reassemble a complex linear series of sometimes repetitive data out of a heap of snippets.

It's nice to see a method validated so publicly and neatly, even though any genome is much older, and much longer, and our concordance covers only a few percent of the whole.

**Billions and billions.** Here are some of the numbers we've stumbled across preparing recent articles. Consider, once again: Fifty-four biotech-based companies spent \$11.6 billion on research and development over the past year (Aug. '91, p. 690). Public equity markets have poured a fresh \$1.8 billion into biotechnology so far this year (Sept. '91, p. 818). All together, the 292 academic and industrial biotechnologists surveyed for this year's compensation survey (Sept. '91, p. 799) say they themselves spent a combined \$1.6 billion last year (not all of that went to research, though the respondents reported that their organizations' research budgets averaged \$46 million plus). Add that activity to the \$10 billion or so spent by national biomedical research organizations worldwide (never mind the private foundations). The sum stuns.

**Oops.** We rarely use this space to apologize, but an apology is due to the folks at Abbott Biotech (Needham Heights, MA, formerly Damon Biotech) for implying...er, stating, actually...that the company was anything less than robust despite the change of name. In the table accompanying "Cell Culture Oversold" (*Bio/Technology* 9:810-812, Sept. '91), we listed Damon Biotech among the wounded—"operations scaled back or suspended"—in the contract cell culture wars. In fact, Abbott Biotech officials assure us that the company is doing more business—and more outside business—than ever before.

—Douglas McCormick

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