members who are fighting an uphill battle to delay the binary program, in general, and at least the procurement item in the 1975 budget. Among them are Donald M. Fraser (D–Minn.), Floyd V. Hicks (D–Wash.), and Patricia Schroeder (D–Colo.). The procurement item appears only in the DOD appropriations bills, not in the authorizing legislation. In related action, both the House and Senate armed services committees have trimmed an unspecified "lethal chemicals" request of $6.9 million by $1.9 million.

Research on lethal chemicals, including binary weapons, is only a portion of the total budget for chemical warfare and related activities. DOD spends approximately $50 million per year on research and procurement in chemical warfare. In addition, about the same sum is spent for both defensive biological research (which is still permitted under the 1972 Biological Weapons Convention) and on related ordnance.

For its part, the DOD has justified the binaries as a needed deterrent. Amos A. Jordan, Acting Assistant Secretary of Defense, International Security Affairs, told the subcommittee on national security policy and scientific development of the House Foreign Affairs Committee on 9 May, "We believe the Soviet Union is better prepared to operate offensively and defensively in a chemical warfare environment than any other nation in the world." To support his claim, Jordan offered no substantive evidence. But he asserted that the Arab military materiel captured during the October Mideast war included Soviet-supplied "CW [chemical warfare] defensive equipment."

On the subject of the Geneva talks, Jordan's prepared statement did not address the issue of the threat posed by the binaries. It simply echoed the U.S. position at Geneva, "The Soviet draft [chemical weapons ban] does not contain adequate verification provisions."

And, despite the fact that several people are convinced that the binary procurement item shows that DOD fully intends to produce these weapons, Jordan said: "These weapons are still in development, and no Administration production decision has yet been made beyond Department of Defense advance planning for the loading, assembling, and packaging facility."

The importance of the U.S. binary program to the Geneva talks is that under the 1972 Biological Weapons Convention, in Article IX, the United States committed itself to negotiate in good faith for an early agreement to ban chemical weapons. Article IX says:

> Each State Party to this Convention affirms the recognized objective of effective prohibition of chemical weapons and, to this end, undertakes to continue negotiations in good faith with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction. . . .

Mongolia Objects

After the convention was signed, the Soviet Union put forward a draft chemical weapons ban; subsequently, the Japanese introduced a step-by-step version of a ban. To all this, the United States has said it would respond, and many CCD nations understand this to mean that the United States would submit a draft treaty of its own. But none has been submitted, and for practical purposes the talks are stalled until the United States acts.

Evidence of this came while Jordan and other witnesses were testifying in Washington on 9 May, when M. Dugersuren, the CCD representative of the Mongolian People's Republic, rose at the Geneva talks and said:

> . . . So far there have been no positive steps by the United States. . . . The United States' intention is to embark on the production of new types of chemical means of warfare such as "binary weapons". . . . My delegation is inclined to share the view that if the United States was to carry out its plan it would make solution of the problem of banning chemical weapons impossible.

HeLa (for Henrietta Lacks)

Every biologist worth his test tube knows about HeLa cells, the first established human cell line which has become a staple of hundreds of laboratories around the world. Initially grown in tissue culture in 1951, HeLa cells have turned out to be one of the hardiest and most prolific of cultured human cells.

"HeLa, with a generation time of about 24 hours, if allowed to grow uninhibited under optimal conditions, would have taken over the world by this time," a team of scientists from Johns Hopkins University has written. "As it is, the mass of HeLa cells that has been grown must be enormous, as is also the information which has been derived from their study."

Recently, the News and Comment section reported that HeLa cells may surreptitiously be taking over cultures in cancer laboratories here and abroad (*Science*, 7 June) and, in that report, repeated the lore about the origin of those cells. "In February 1951, a woman named Helen Lane was being treated for cancer of the cervix at the Johns Hopkins Hospital in Baltimore. Although she ultimately died of her cancer, Helen Lane achieved an unusual measure of immortality—cells derived from her tumor are still very much alive and with us."

This reporter spent a couple hours tracing the origins of HeLa cells. Well, sometimes you can't win. Helen Lane, it seems, never lived. But Henrietta Lacks did, long protected by the pseudonym Helen Lane. Her true identity was brought to our attention by Victor McKusick, chairman of medicine at Hopkins who, with Howard Jones, Peter Harper, and Kuang-Dong Wuu, wrote about "The HeLa cell and a reappraisal of its origins" in *Obstetrics and Gynecology* in December 1971.

Not only did they reveal that Helen Lane was really Henrietta Lacks, they also reported that the original HeLa cells were not the type everyone who knows about such things presumes them to be. "All these years, HeLa has been considered an epidermoid carcinoma of the cervix [a slow-growing tumor of surface or skin-like cells]. Its histopathology has been taken for granted." Hopkins' researchers decided to take another look at the original slides from 1951 and pronounced HeLa cells to be "without a doubt . . . a very aggressive adenocarcinoma of the cervix [a glandular tumor]." It killed Henrietta Lacks in 8 months.

None of this alters the validity of work done with HeLa cells but it may be worth noting—for the record.—B.J.C.