

Brinkmann pHisolytes. New carrier ampholytes for isoelectric focusing.

pH 2	—	10
pH 2	— 4	
pH 3	— 5	
pH 4	— 6	
pH 5	— 7	
pH 6	— 8	
pH 7	— 9	
pH 8	— 10	
pH 9	— 11	



Because they contain more amphoteres than other ampholytes, Brinkmann pHisolytes provide a wider general pH range, from pH 2 to 10. pHisolytes are also available in eight individual pH ranges, each with a span of 2 pH units, from pH 2-4 to pH 9-11.

pHisolytes are composed of amphoteres synthesized from aliphatic polyamines with primary, secondary and tertiary amines and guanidine groups. They range in molecular weight from 400 to 700 and are easily separated from proteins by gel filtration techniques. pHisolytes come in sterile vials of 25 ml; each batch is tested for buffering capacity and adsorption.

For literature, just write: Brinkmann Instruments, Cantiague Rd, Westbury, N.Y. 11590. In Canada: 50 Galaxy Blvd., Rexdale (Toronto), Ont.

B Brinkmann

LETTERS

SIPI Expansion

John Walsh's fine article (News and Comment, 9 Apr., p. 122) accurately describes the program and activities of the Scientists' Institute for Public Information (SIPI). I would make only one amendment. It is possible to infer from the article that the movement to consider economic issues as part of our charge was taken *in spite* of Barry Commoner's wishes; as any reader of Commoner's writings knows, he has been the nation's leader in identifying the economic consequences of first our environmental policies, and now our energy policies. To infer that this leadership has not been felt in the activities and program of SIPI, for which Commoner serves as chairman of the board of directors, would be a mistake. His leadership has been felt in all areas of work, and particularly in the area of energy (Commoner is also co-chairman of SIPI's Task Force on Energy Options).

ALAN MCGOWAN

*Scientists' Institute for Public Information,
49 East 53 Street, New York 10022*

I regret that in John Walsh's account of the development of SIPI (Scientists' Institute for Public Information) he was unable—doubtless due to the constraints of space—to discuss the important role which the AAAS Committee on Science in the Promotion of Human Welfare, of which Barry Commoner was the first chairman, played in launching the science information movement and the formation of SIPI. The additional strength that the AAAS gave to the young movement in a series of cooperative ventures was a crucial element in its growth, and Barry Commoner was the link between an awakening social conscience within the Association and a series of specific tasks undertaken by local groups, coordinated by the activities of SIPI.

MARGARET MEAD

*American Museum of Natural History,
Central Park West at 79th Street,
New York 10024*

Hayflick's Achievements

The article "Hayflick's tragedy: The rise and fall of a human cell line" by Nicholas Wade (News and Comment, 9 Apr., p. 125) focuses on accusations concerning Leonard Hayflick's handling of ampules of WI-38 cells and suggests that the charges made as a result of a Nation-

al Institutes of Health investigation, unless refuted, "... could have severe repercussions on [Hayflick's] reputation as a scientist." Furthermore, Wade's article states that because stocks of WI-38 are limited, "credit for the next generation of vaccines will go to MRC-5 instead of to Hayflick and WI-38."

These comments do not sufficiently value Len Hayflick's long record of influential scientific research. Even if MRC-5 is used instead of WI-38, much credit should go to Hayflick for having most clearly demonstrated the properties of normal human cells in tissue culture (1). His work refuted the 50-year-old dogma that normal cells could be immortal in tissue culture (2) and was vigorously attacked by traditionalists throughout the 1960's. He did not give up, and his studies were repeated over and over again; they now are generally accepted. In fact, the development and definition of MRC-5 was one of many confirmations of Hayflick's studies, relying extensively on his techniques (3).

Besides this important work in the field of tissue culture, Hayflick proposed that the limited growth capacity of cultured human cells makes them a valuable model for studies of senescence. This greatly excited the field of gerontology and inspired much current research testing Hayflick's hypothesis that aging is programmed by the limited proliferative capacities of normal cells.

Surely these accomplishments secure Hayflick's reputation as one of the important scientists of our generation, regardless of the current investigation.

DAVID E. HARRISON

*Jackson Laboratory,
Bar Harbor, Maine 04609*

References

1. L. Hayflick and P. S. Moorhead, *Exp. Cell Res.* **25**, 585 (1961); L. Hayflick, *ibid.* **37**, 614 (1965).
2. A. Carrel, *J. Exp. Med.* **15**, 516 (1912); A. H. Ebeling, *ibid.* **17**, 273 (1913).
3. J. P. Jacobs, C. M. Jones, J. P. Baille, *Nature (London)* **227**, 168 (1970).

PCB's: How Toxic?

Polychlorinated biphenyls (PCB's) are recognized as ubiquitous environmental contaminants. In 1973, this worldwide problem resulted in a decision by the Organization for Economic Cooperation and Development to control the use and disposal of PCB's (1). At present, both the U.S. and Canadian governments are preparing legislation for the control of toxic substances.

The concern over PCB's is based on two factors, namely their environmental