

by candidates representing "a mass of average, not innovatory works," who finally admitted "that they were competing for the prize with a preparation that had been created overseas long before them."

This calls to mind an article in *Science* 8 years ago entitled "Penalty of isolationism" (1) in which I said:

The repetitions and the frequently unjustified creation of "new species" of antibiotic-producing organisms and of "new antibiotics" can be avoided only by close collaboration among the scientific workers throughout the world. The creation of an International Antibiotics Board [for the purpose of comparing new compounds] is also highly essential at this time.

An important development bearing upon the isolation and utilization of new antibiotics may be cited here:

In 1949, a new antibiotic, designated as neomycin (2), was isolated in our laboratory. Neomycin in time became important in the armamentarium of the medical profession, and was manufactured by a number of industrial organizations in this country and abroad. As soon as its value became recognized, studies were initiated in numerous laboratories throughout the world in an attempt to isolate similar antibiotics. Some of these efforts proved successful, but, unfortunately, many of the new isolates were identical with neomycin. In the Soviet Union, three such preparations were isolated and were described under the names "colimycin," "mycerin," and "framycin." Although it was suspected, both in the Soviet Union and abroad, that these so-called "new" antibiotics were nothing but neomycin preparations and that all three were identical with neomycin, the manufacture of each of them was carried out in a separate plant. An extensive literature was accumulated dealing with their use (3). Much effort and duplication could have been avoided if investigations on the use of neomycin conducted in this country and abroad had been consulted (4).

Fortunately, the higher authorities in the Soviet Union have now become aware of this duplication of effort and have issued the following directive (5):

For the period of 1956–1962, the Ministry of Health of the SSSR permitted the medicinal use of 3 antibiotics of the neomycin group: colimycin, mycerin, and framycin.

In the course of further comparative study of these preparations, it was established that they are identical, as a result of which the Pharmacological Committee

recommended to produce in the future only one preparation, utilizing for this purpose mycerin and applying to it the name neomycin.

On order of the Ministry of Health of the SSSR for August 6, 1964, the decision of the Pharmacological Committee to produce one preparation of the neomycin group and to utilize for this purpose the producer of mycerin is approved. The preparation will carry the name "Neomycin." The Pharmacological Committee is requested to introduce the necessary changes and instructions in the use of the preparation, stating that the previously produced colimycin, mycerin, and framycin are identical with neomycin. The Government Pharmacopoeia Committee is requested to make the corresponding changes in the technological treatment of the preparation. The Chief Administration of the Chemico-Pharmaceutical Preparations and Antibiotics is requested, beginning January 1, 1965, to observe the plans of production of medicinal preparations, namely the production of neomycin in place of colimycin, mycerin, and framycin.

One can only welcome this decision of the Ministry of Health of the U.S.S.R. as leading to uniformity in the recognition, evaluation, and use of an important pharmaceutical preparation, and hope that there will be a continued trend in that direction.

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References

1. S. A. Waksman, *Science* **125**, 585 (1957).
2. ——— and H. A. Lechevalier, *ibid.* **109**, 305 (1949).
3. G. F. Gause, Ed., *Antibiotic Colimycin and Its Clinical Application* (Gosizdat Medgiz, Moscow, 1959); V. A. Kuzyaeva, *Antibiotiki* **9**, 975 (1964).
4. S. A. Waksman, Ed., *Neomycin: Its Nature and Practical Applications* (Rutgers Univ. Press, New Brunswick, N.J., 1953; Williams and Wilkins, Baltimore, 1958).
5. *Antibiotiki* **9**, 1133 (1964).

Long-Abandoned Views

Anyone who has worked in an active field for many years is likely to—indeed, *should*—have changed his opinions on various points. It is then disconcerting to find long-abandoned views quoted or attacked as if current, but it is hardly practical to review all of one's corpus regularly and to publish corrections and emendations for every point no longer maintained.

A recent report in *Science* (1) refers to my opinion in 1931 (2) that the fossil *Anagale* is a tupaoid and to my classification in 1945 (3) of the tupaoids as primates. At present I do not

believe that *Anagale* is a tupaoid or a primate, although I do think it too strong to say (1) that McKenna (4) has "shown" that it is not. His work merely indicates that what seemed probable in 1931 seems improbable in 1965.

The affinities of the tupaoids, without *Anagale*, seem to me at present to be quite uncertain. I referred them to the Primates more on the evidence marshaled by Le Gros Clark (5) than on the evidence of *Anagale*. Le Gros Clark's evidence still seems valid and it has received much later support, but I agree that such findings as those of Jane, Campbell, and Yashon (1) are also valid evidence and change the weight of probabilities. In any case, I would not now place the tupaoids in the Lemuriformes. The tupaoids arose, and still stand, somewhere between the earliest placental (nominally insectivore) stem and that of the Primates. Their reference to one group or the other is in part arbitrary or semantic. Use of them to represent the earliest primate or latest preprimate stage of evolution is as valid and useful, and subject to as much caution, as is any use of living animals to represent earlier phylogenetic stages.

I take this occasion also to record another change of opinion about fossil primates that is still being ignored, as for example by Dobzhansky in a recent excellent book (6). In 1945 (3, actually written in and prior to 1942) I referred the australopithecines to a subfamily Australopithecinae of the family Pongidae. I now (for example in 7) consider them as a single genus, *Australopithecus*, in the family Hominidae. As that family includes only two really distinct genera of well-established affinities (*Homo* is of course the other), I do not consider subfamily distinction useful at present.

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References

1. J. A. Jane, C. B. G. Campbell, D. Yashon, *Science* **147**, 153 (1965).
2. G. G. Simpson, *Amer. Mus. Novitates* No. 505 (1931).
3. ———, *Bull. Amer. Mus. Natur. Hist.* **85**, 1 (1945).
4. M. C. McKenna, *Amer. Mus. Novitates* No. 2158 (1963).
5. W. E. Le Gros Clark, *Early Forerunners of Man* (London, Tindall & Cox, 1934).
6. Th. Dobzhansky, *Mankind Evolving* (Yale Univ. Press, New Haven, 1962).
7. G. G. Simpson, "The Meaning of taxonomic statements," in *Classification and Human Evolution*, S. L. Washburn, Ed. (Wenner-Gren Foundation, Viking Fund Publications in Anthropology, New York, 1964).