

On November 6-7, 1950, Peabody and Vanderbilt were hosts to the Southern College Personnel Association. This organization's banquet was nonsegregated.

The point here is not that the hotel at which the Association held its banquet discriminates against Negroes. The point is that it was up to the arrangements committee to find a place, on the campus of one of the host institutions or elsewhere, where all mathematicians could participate.

Sincerely yours,

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Nuttall Memorial Celebration

The year 1951 marks the end of the first half-century of systematic serology. In 1901 Nuttall first reported the results of testing precipitin antisera with a variety of antigens of animal origin, and with these reports and the researches that made them possible the science of comparative or systematic serology may be said to have been founded.

Appropriate observance of the half century of systematic serology is being made at Rutgers University's Serological Museum this year. On March 19 a Nuttall Memorial Celebration was held, with an exhibition of the work of the museum and of its Nuttall historical materials. The latter included some of Nuttall's original fluid sera, four of his charts, and two sets of protocols relating to the researches in blood relationship, all of which were given to the director of the Serological Museum during his visits to Cambridge in August 1950. Thanks and sincere appreciation are due to D. D. Keilin and Cambridge University for both the preservation and the gift of these historic materials.

The celebration was concluded with a symposium sponsored by the Rutgers Chapter of Sigma Xi, entitled "A Half-Century of Systematic Serology; the Work of Nuttall and his Associates at Cambridge and of his Successors in America." Those participating were: T. C. Nelson, whose account of Nuttall was based on his visits to Nuttall's laboratory and home in 1931; P. A. Moody, who reported on researches in systematic serology carried on under his direction; and Alan Boyden, who briefly summarized the more important work in the field and gave an appraisal of the significance of Nuttall's contributions to it:

Nuttall himself was aware of some of the limitations of his techniques. In 1902, after completing a series of quantitative tests in which he measured the volumes of settled precipitates, he said, "I do not wish these numbers to be taken as final; nevertheless, they show the essential correctness of the previous crude results. To obtain a constant it will be necessary to make repeated tests with the bloods of each species and with different antisera of one kind, making the tests with different pro-

portions of antiserum. I am inclined to believe that with care we shall perhaps be able to measure species by this method, for it appears from the above results that there are measurable differences in the reactions obtained with related bloods, in other words, determinable degrees of blood relationship which we may be able to formulate."

These words were prophetic—they pointed the way to future progress, and especially to the developments of the last decade. In spite of the obvious limitations of Nuttall's own techniques, he is unquestionably the founder of systematic serology and his contributions to the subject are many:

1) He was the first to have the insight to appreciate the potential significance of systematic serology and the enthusiasm to undertake an extensive study of its problems.

2) He inspired a small band of workers, Dinkelspiel, Graham-Smith, Strangeways, and Sanger, to join him in his studies of blood relationship and they worked effectively together in building the foundation for the future.

3) Nuttall and his associates did demonstrate a general parallelism between the systematic positions of animals, where they seemed to be relatively certain, and the precipitin tests of their sera. In fact, among the quantitative tests, only about 10% are obvious errors in view of modern knowledge in regard to the relationships of the species tested.

4) Nuttall and his associates provided evidences bearing upon the systematic positions of species or groups of doubtful relationship. Thus it was found that:

a) Antilimulus serum reacted more strongly with arachnid sera than with decapod sera.

b) The sera of whales were more similar to the sera of eventoes ungulates than to those of any other orders of Mammalia tested, (which we have recently confirmed).

c) The serum and egg proteins of Aves show some evidences of similarity to those of Chelonia and Crocodilia.

The greatness of a man does not depend alone upon his contribution of detailed fact to a subject; it also depends upon the kind of foundation he lays upon which others may build. Entirely aside from his great creative works in the field of parasitology and public health, we attest to his eminence in the field of systematic serology of which he was the founder. A half century of substantial progress has followed his lines of thought. And, as he considered his own work to be of a preliminary nature and looked to us to carry on, we, in turn, look to the future and to others with hope and confidence. Keen young men and women have been and are being prepared to continue the study of comparative serology. It will be both their pleasure and obligation to celebrate the Nuttall centenary at the appropriate time, and to recount the further developments which will then have been made manifest.

A fuller account of the celebration, including the reports of the principal speakers, together with other matters of significance relating to the half-century's developments in systematic serology, will be published in the *Bulletin of the Serological Museum*. Copies are available upon request.

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