Action (Johns Hopkins Press, Baltimore, Md., 1954), p. 599.
12. C. E. Dalgliesh, *Nature* 171, 1027 (1953).
13. J. T. Park, *J. Biol. Chem.* 194, 897 (1952).
14. M. B. Hoagland, *Biochim. et Biophys. Acta* 16, 288 (1955).
15. F. Turba and H. Esser, *Biochem. Z.* 327, 93 (1955).
16. E. F. Gale, *Advances in Protein Chem.* 8, 287 (1953).
17. J. A. DeMoss and G. D. Novelli, *Biochim et Biophys. Acta* 18, 592 (1955).
18. J. E. Snoke and K. Bloch, *J. Biol. Chem.* 199, 407 (1952); 213, 825 (1955).
19. W. K. Maas and G. D. Novelli, *Arch. Biochem. and Biophys.* 43, 236 (1953).
20. H. Chantrenne, *J. Biol. Chem.* 189, 227 (1951).
21. R. L. M. Synge, in *The Chemical Structure of Proteins* (Little, Brown, Boston, 1953), p. 43.
22. B. A. Askonas *et al.*, *Biochem. J. London* 61, 105 (1955).
23. H. M. Muir, A. Neuberger, J. C. Perrone, *ibid.* 52, 87 (1952).
24. M. V. Simpson and S. F. Velick, *J. Biol. Chem.* 208, 61 (1954); M. Heimberg and S. F. Velick, *J. Biol. Chem.* 208, 725 (1954).
25. B. Rotman and S. Spiegelman, *J. Bacteriol.* 68, 419 (1954).
26. C. B. Anfinsen, *Biochim. et Biophys. Acta* 17, 593 (1955); K. Linderström-Lang, *Cold Spring Harbor Symposia Quant. Biol.* 14, 117 (1950).
27. R. Schoenheimer, *The Dynamic State of Body Constituents* (Harvard Univ. Press, Cambridge, 1942).
28. D. Steinberg and M. Vaughan, unpublished data.
29. M. V. Simpson, *J. Biol. Chem.* 201, 143 (1953).
30. M. D. Francis and T. Winnick, *ibid.* 202, 273 (1953); H. Halvorson and S. Spiegelman, *J. Bacteriol.* 64, 207 (1952).
31. G. T. Cori, S. P. Colowick, C. F. Cori, *J. Biol. Chem.* 123, 375 (1938); M. Grunberg-Manago, P. J. Ortiz, S. Ochoa, *Science* 122, 907 (1955).
32. F. Sanger and H. Tuppy, *Biochem. J. London* 49, 481 (1951); F. Sanger and E. O. P. Thompson, *Biochem. J. London* 53, 366 (1953).
33. K. Shimura *et al.*, *J. Biochem. Japan* 43, 101 (1956).

J. M. D. Olmsted, Physiologist and Historian

James Montrose Duncan Olmsted, emeritus professor of physiology, University of California, died 26 May 1956 in his home in Berkeley at the age of 70 years. Sincerely mourned by a host of colleagues and pupils, Olmsted combined marked gentleness of demeanor and character with high scholarly standards. Under his aegis, his department, which had lacked luster after the departure of Jacques Loeb, regained distinction in both teaching and research. Olmsted had been a pupil of G. H. Parker, a Rhodes scholar at Oxford, and a former colleague of McLeod at Toronto. He mediated satisfactory relationships with the University of California School of Medicine as well as with the Berkeley undergraduate and graduate curricula. The success of Olmsted's department can be attributed not only to his urbanity but to his vision and perspective, and his appointments to his staff indicated a capacity to correctly estimate talents in quite diverse personalities. His field of personal preference in the medical teaching program concerned the physiology of the organs of special sense, a subject to which he contributed by researches on the eye and a subject reviewed by him in the *Annual Reviews of Physiology* and handled by him in the Bard-McLeod textbook.

His scientific contributions, as senior author and coauthor, include considerably more than 100 papers. Beginning with a chemical contribution from Oxford, he quickly entered the realm of general physiology in experiments on lower organisms at Bermuda, Wood's Hole, and elsewhere, and, in this field, he published a beautiful paper ["The nerve as a formative influence in the development of taste buds," *J. Comp. Neurology* **31**, 465 (1920)] on the effects of cutting the branches of the seventh cranial nerve to the barbels of the catfish. Here he established the degeneration of the taste buds subsequent to nerve section, their regeneration only after regeneration of the nerves, and nerve penetration into the germinative layer of the epidermis, leading to the formation of dermal papillae and then taste buds.

On joining the staff at Toronto, he enthusiastically entered the field of mammalian and human physiology, at the time that the Toronto discovery of insulin, its preparation, and the study of its effects created a classical epoch in insulin research. Olmsted's examination of the effect of insulin on the nervous system was an important part of the pioneer Toronto program. Indeed, two of the most important subsequent discoveries in this field—the hypersensitivity to insulin of hypophysectomized animals and the "diabetogenic" effect of the anterior pituitary—were clearly recognized in the paper by Olmsted and Logan of October 1923.

Olmsted is to be credited with outstanding achievement in his studies on the history of physiology and especially in four enjoyable and authoritative biographies of Magendie, Claude Bernard, and Brown-Sequard. In one of these he was joined by his wife, Evangeline Harris Olmsted. The personalities described in these works [*Claude Bernard, Physiologist* (Harper, New York and London, 1938); *Francois Magendie, Pioneer in Experimental Physiology and Scientific Medicine in XIX Century France* (Schuman, New York, 1944); *Charles-Edouard Brown-Sequard, a Nineteenth Century Neurologist and Endocrinologist* (Johns Hopkins Press, Baltimore, 1946); with E. Harris Olmsted, *Claude Bernard and the Experimental Method in Medicine* (Schuman, New York, 1952)] were responsible for the rise of experimental physiology in France, and Olmsted's portrayal combined literary charm with scientific accuracy. It is a surprising fact that no French scholar had discerned or taken advantage of the opportunity to chronicle the lives of these scientists and significant that the Parisian Academy of Science recognized Olmsted's successful achievement by awarding him its Prix Binoux and the French National Academy of Medicine by awarding him its Prix de Martignoni.

How he came to write these biographies is told in a very charming way in a short article that he wrote for his undergraduate college, appearing in the Middlebury College News Letter. It may, perhaps, be mentioned that Olmsted contributed superbly succinct summaries of Claude Bernard's discovery of glycogen and its role in carbohydrate metabolism to *Diabetes* in 1953 and to the *Journal of the American Dietetic Association* in 1954.

Olmsted's cultural interests, shared with his wife, included participation with a small group of other faculty members in amateur theatrical performances. Professor Olmsted painted, and with talent, and was pleased to be a member of the San Francisco Association of Artists.

His life is surely a reminder that, although controversy and indeed hostility may arise in human affairs, they would not appear to be ineluctable and that modesty and kindliness ideally accompany all endeavor.

HERBERT M. EVANS
Institute of Experimental Biology, University of California, Berkeley