COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY

VOLUME XLVII—PART 1

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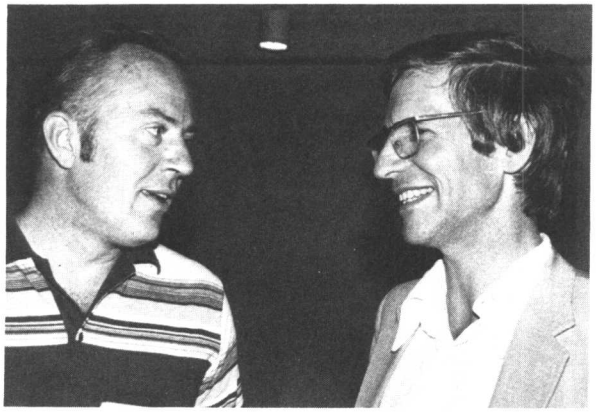
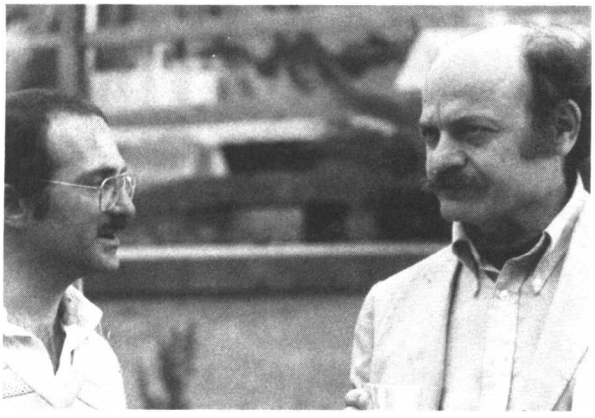

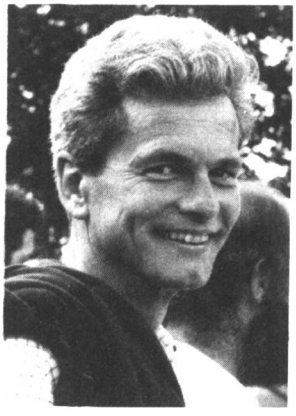


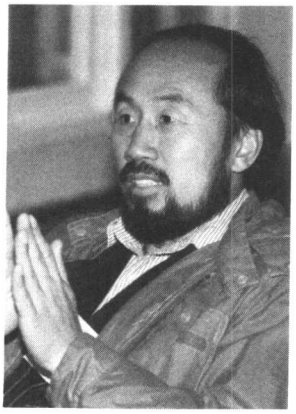

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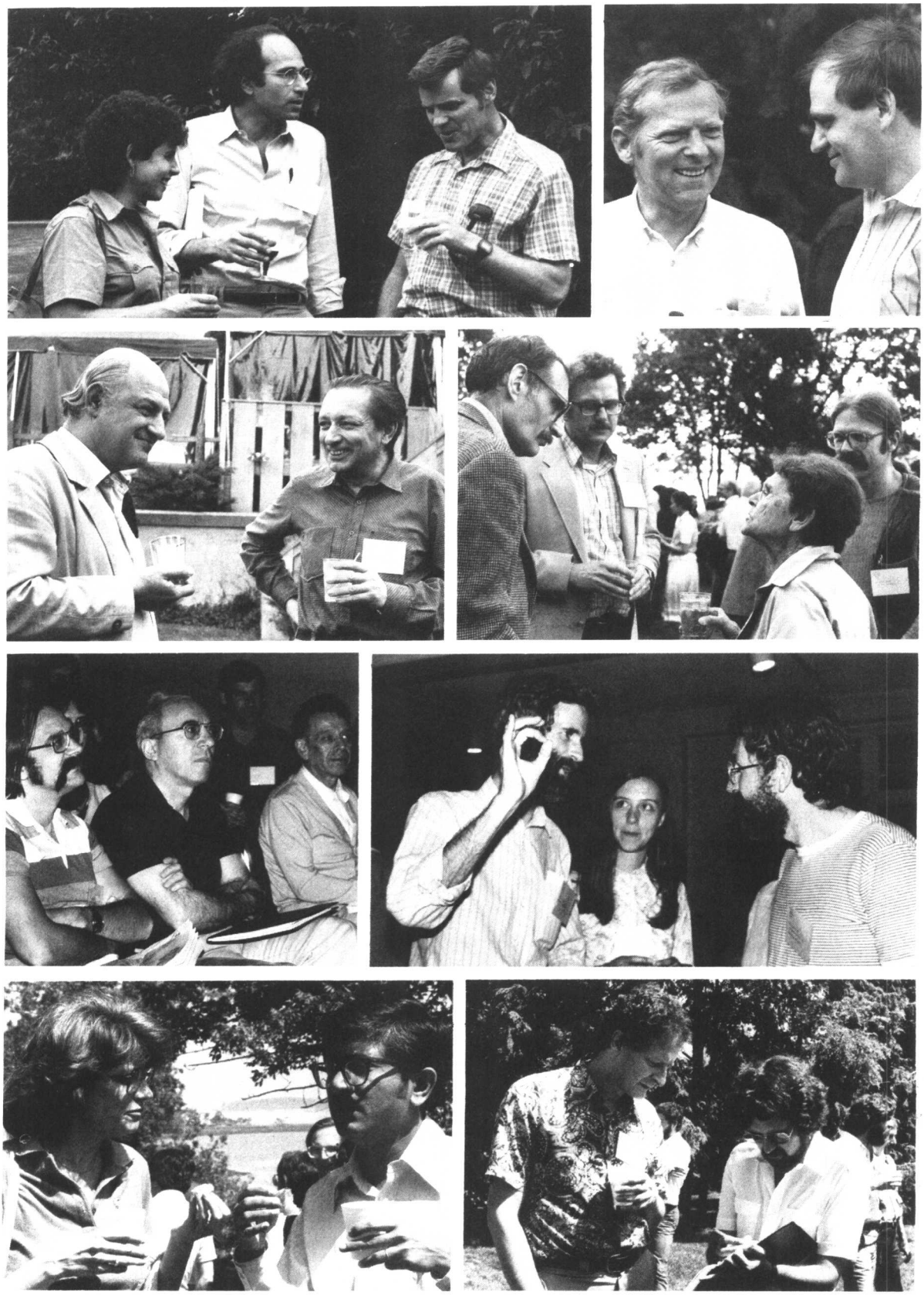
Third row: C. Cantor, A. Rich; K. Matsubara, R. Sternglanz
Fourth row: T. Koller; D. Crothers; H. Doty; S.-H. Kim



First row: J. Parnes, R. Axel, L. Hood; J. Van Boom, G.V. Gursky
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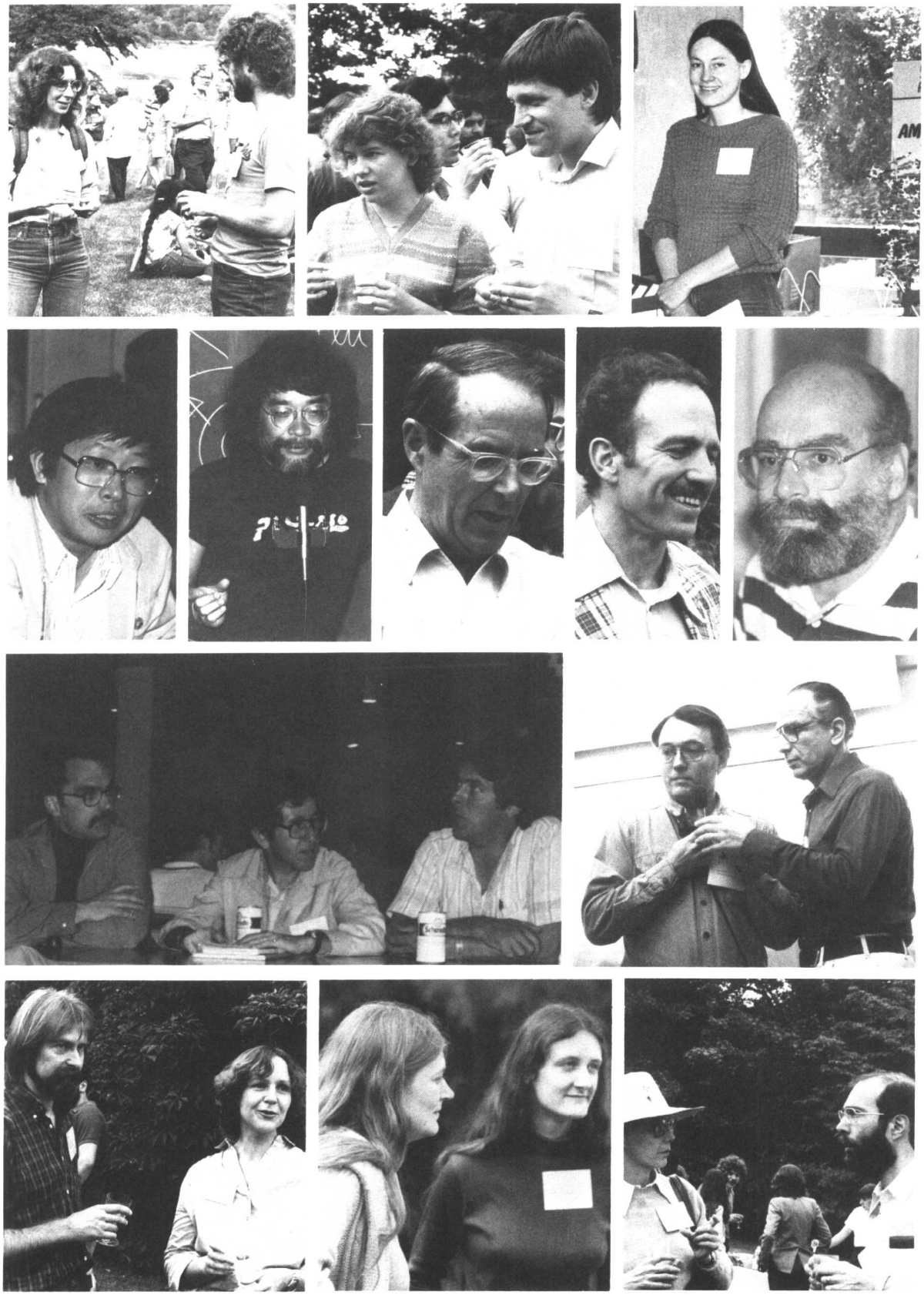
Fourth row: N. Hopkins, D. Chattoraj; H. Sobell, D. Lilley



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Third row: W. McClure, J. Lebowitz, C. Benham; R. Reeder, J. Hurwitz
Fourth row: A. Nordheim, R. Kahmann; D. Daniels, L. Bell; S. Spengler, K. Bloom

Foreword

The double helix is deceptively simple. When first found in 1953, it appeared so beautifully clear that for a brief period it seemed that by mere visual inspection we must learn all its mysteries. Now almost 30 years later, DNA structure is no longer a child's game, and those who play with it must be both experienced and of the courage to seek elegance among the almost overwhelming perturbations of its basic double-helical configuration. Not only can DNA be overcoiled or undercoiled, all under strict enzymatic control, it can turn to the left as well as to the right. Since these complexities are not laboratory artifacts but, in fact, provide the molecular underpinnings for the successful functioning of our genetic material, further progress in more firmly establishing the various forms of DNA is likely to be essential for the future of much biological research.

The moment thus was propitious for a high-level meeting in which all aspects of DNA could be presented and analyzed. So, for the topic of our 47th annual Symposium, we chose "The Structures of DNA." From the start we realized that the number of speakers was likely to be very large, and so we sought the advice of many experts as to whom to invite. In particular, I wish to acknowledge the invaluable counsel given by Charles Cantor, Pierre Chambon, Don Crothers, Richard Dickerson, Gary Felsenfeld, Aaron Klug, Alex Rich, and Jim Wang. The formal program contained 114 speakers with many additional, last-minute informal presentations made during the course of the various sessions. Given the inherent complexity of the topics, this was indeed a very demanding Symposium. But because of the consistently high quality of the presentations, this Symposium was also felt by virtually all of the 244 participants to rank among the most stimulating of scientific meetings that they had ever attended.

Again we were aided by the cheerfully courteous competence of our Meetings Office, and we are indeed fortunate that it is so well staffed by Gladys Kist, Maureen Berejka, and Barbara Ward. Herb Parsons again saw to it that our audio-visual arrangements performed perfectly, unaccompanied by the frequent upside-down slide projections that often accompany large meetings.

The most necessary financial help that let us assemble such a massive program was again provided by the National Institutes of Health, the National Science Foundation, and the Department of Energy.

Serving as the coeditors of these transcriptions have been Douglas Owen and Dorothy Brown, assisted in particular by Joan Ebert, Mary Cozza, and Karen Sundin, as well as by our active Publications Department, most ably presided over by Nancy Ford.

October 27, 1982

J.D. Watson

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