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Preface to *Host-Parasite Interactions*, edited by Brent B. Nickol

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PREFACE

Brent B. Nickol

University of Nebraska-Lincoln

This volume embodies papers delivered during a symposium held October 5-7, 1977, in Lincoln, Nebraska. The symposium was convened by the School of Life Sciences, College of Arts and Sciences, of the University of Nebraska-Lincoln on the occasion of the dedication of a new life sciences building, Manter Hall of Life Sciences.

Papers address host-parasite interactions at three distinct levels: between populations; between individuals; and at the molecular level. We conceive the interface between populations to consist of interactions between parasites and hosts or potential hosts that transcend the sum of interactions between individuals. A biotic environment continually readjusts to changes in anyone of its living components, and populations of hosts and parasites coevolve with respect to each other into relationships that would not be achieved between a population and its physical environment. Likewise, dynamics of parasite populations and host community structure reflect relationships not manifested in individual interactions. These topics are explored in the section entitled "Encounter: The Interface between Populations."

The section "Interfaces between Individuals" addresses interaction between individual hosts and parasites. Such interactions include host and parasite response to each other morphologically and recognition mechanisms.

Molecular mimicry of host by parasite and biochemical interdependence of parasite and host represent molecular level interfaces. A concluding paper speculating on the origin of intracellular parasitism is included in the section "Molecular Confrontation: Molecular Level Interfaces," but many of the principles discussed apply more generally to chapters of each preceding section.

It is apparent that this symposium required the labors and support of many individuals and organizations. The imagination and creativity of other members of the symposium committee, Professors Royce E. Ballinger, J. Michael Daly, John Janovy, Jr., and Mary Hanson Pritchard, were invaluable in program planning. The symposium committee is most grateful to the following for their generous

support: National Institute of Allergy and Infectious Diseases and the Fogarty International Center of the National Institutes of Health; University of Nebraska-Lincoln Research Council; University of Nebraska-Lincoln College of Arts and Sciences, Max D. Larsen, Dean; and University of Nebraska-Lincoln School of Life Sciences, Russel H. Meints, Director.

Finally, we wish to acknowledge the speakers and participants without whom the symposium could not have succeeded.