

Written in accessible language and complemented by a glossary for easy reference, this book investigates one of the most fundamental and divisive problems in biology: the origin of cells. Assuming only a basic knowledge of cell biology, Franklin M. Harold examines such pivotal subjects as the relationship between cells and genes; the central role of bioenergetics in the origin of life; the status of the universal tree of life with its three stems and viral outliers; and the controversies surrounding the last universal common ancestor. He also delves deeply into the evolution of cellular organization, the origin of complex cells, and the incorporation of symbiotic organelles, and considers the fossil evidence for the earliest life on earth. *In Search of Cell History* shows us just how far we have come in understanding cell evolution—and the evolution of life in general—and how far we still have to go.

"This book is a rare pleasure: a beautiful, rational, wise, and eloquent framing of life's greatest mysteries, what remains to be known, and how we might get there. It should be read by anyone who wonders, seriously, how we came to be. If it does not provide all the answers, that is because we honestly do not know."

NICK LANE, University College London, author of
Life Ascending: The Ten Great Inventions of Evolution

"When dealing with difficult questions such as the origin of life, one yearns for writing that is both sagacious and readable, two qualities that don't always go together. Fortunately, we can forego the need for making a choice. Harold's book provides an account that is both masterful in the pursuit of the very question and in the clarity with which he unravels relevant phenomena. I daresay that few more helpful guides to a complex terrain have come forth since Dante's Beatrice."

MOSELIO SCHAECHTER, Distinguished Professor, emeritus, Tufts University

"The origin of life is one of the great enigmas yet to yield to modern science. While there are other books that attempt to place their own spin on how life came about, *In Search of Cell History* stands alone in that it is written not by one of those advocating a particular viewpoint but instead by one who tries to remain a detached, albeit extremely well informed, observer of events. An excellent piece of scholarly work by a suitably unbiased and appropriately skeptical researcher."

MARK A. FARMER, University of Georgia

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