

"John Tyler Bonner, a distinguished developmental biologist, has long argued that a major driving force in the evolution of complexity is natural selection for large size. Here he takes a radically different view to explain the diversity of form among eukaryotic microorganisms: randomness, not selection, rules their lives. This stimulating and provocative theme is explored with ideas from a variety of fields. It simultaneously introduces students to the nature of a debate on the causes of diversity."

—Peter R. Grant, coauthor of *How and Why Species Multiply:
The Radiation of Darwin's Finches*

"Bonner makes a compelling case that the morphology of microorganisms is governed not by natural selection but by chance. He could be right. But right or wrong, this claim will be hugely controversial. It doesn't just 'approach heresy,' as he puts it. It is heresy."

—Dan McShea, *Duke University*

"The main point of Bonner's book is that the importance of randomness in evolution depends on size. What is new is the claim that small organisms are more likely to have selectively neutral morphological variation. This, if true, is very interesting and important. *Randomness in Evolution* is provocative and will lead to lively discussion."

—Michael Foote, *University of Chicago*



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