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The late **WILLIAM E. BROWN** was professor of biological sciences at Carnegie Mellon University. From 1993 to 2000, he served as department head.

Imaging Life is a current and timely account of how scientists look at the structures that make up the complexity and organization of living organisms. These structures range from individual atoms, molecules and macromolecules to subcellular and cellular volumes, tissues and microbial communities. This "systems biology" understanding of life requires a combination of imaging techniques and, with it, an in-depth understanding of their respective strengths and limitations, as well as how they complement other techniques. Howard, Brown, and Auer show us that the integration of these imaging techniques will allow us to overcome the reductionist approach to biology that dominated the twentieth century, which was aimed at examining the physical and chemical properties of life's constituents, one macromolecule at a time.

And yet, many fundamental questions remain largely unanswered. Life is not simply a set of chemical reactions and physical forces; it features an exquisite spatiotemporal organization that allows an inconceivably large number of chemical processes to coexist, refined by billions of years of evolutionary experimentation. *Imaging Life* argues that we are just now beginning to address the spatiotemporal organizational component of living processes. "Imaging" is needed to reveal the spatiotemporal relationships between components and, thus, to understand organizational guiding principles of living systems. Only through imaging will we be able to decipher the mechanisms and the marvelous organization that enable and sustain the mystery of life. *Imaging Life* shows us how biology is beginning to do just that.

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