

1	Introduction to Nucleic Acid Polymerases: Families, Themes, and Mechanisms	1
	Michael A. Trakselis and Katsuhiko S. Murakami	
2	Eukaryotic Replicative DNA Polymerases	17
	Erin Walsh and Kristin A. Eckert	
3	DNA Repair Polymerases	43
	Robert W. Sobol	
4	Eukaryotic Y-Family Polymerases: A Biochemical and Structural Perspective	85
	John M. Pryor, Lynne M. Dieckman, Elizabeth M. Boehm, and M. Todd Washington	
5	DNA Polymerases That Perform Template-Independent DNA Synthesis	109
	Anthony J. Berdis	
6	Archaeal DNA Polymerases: Enzymatic Abilities, Coordination, and Unique Properties	139
	Michael A. Trakselis and Robert J. Bauer	
7	Engineered DNA Polymerases	163
	Roberto Laos, Ryan W. Shaw, and Steven A. Benner	
8	Reverse Transcriptases	189
	Stuart F.J. Le Grice and Marcin Nowotny	
9	Telomerase: A Eukaryotic DNA Polymerase Specialized in Telomeric Repeat Synthesis	215
	Andrew F. Brown, Joshua D. Podlevsky, and Julian J.-L. Chen	
10	Bacteriophage RNA Polymerases	237
	Ritwika S. Basu and Katsuhiko S. Murakami	

11	Mitochondrial DNA and RNA Polymerases	251
	Y. Whitney Yin	
12	Eukaryotic RNA Polymerase II	277
	David A. Bushnell and Roger D. Kornberg	
13	Plant Multisubunit RNA Polymerases IV and V	289
	Thomas S. Ream, Jeremy R. Haag, and Craig S. Pikaard	
14	Structure, Dynamics, and Fidelity of RNA-Dependent RNA Polymerases	309
	David D. Boehr, Jamie J. Arnold, Ibrahim M. Moustafa, and Craig E. Cameron	
	Index	335