THAT WHICH IS CLAIMED:

1. A nucleic acid molecule comprising a polynucleotide encoding an RNA-guided nuclease (RGN) polypeptide, wherein said polynucleotide comprises a nucleotide sequence encoding an RGN polypeptide comprising an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 1;

wherein said RGN polypeptide is capable of binding a target DNA sequence, and wherein said target DNA sequence is located 5' and adjacent to a protospacer adjacent motif (PAM) site having the sequence set forth as SEQ ID NO: 7.

2. The nucleic acid molecule of claim 1, wherein said polynucleotide encoding an RGN polypeptide is operably linked to a promoter heterologous to said polynucleotide.

3. The nucleic acid molecule of claim 1 or 2, wherein said RGN polypeptide comprises an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 1.

4. The nucleic acid molecule of claim 1 or 2, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 1.

5. The nucleic acid molecule of claim 1 or 2, wherein said RGN polypeptide is nuclease dead or functions as a nickase.

6. The nucleic acid molecule of claim 5, wherein the RGN polypeptide is operably fused to a base-editing polypeptide.

7. A vector comprising the nucleic acid molecule of any one of claims 1-6.

8. The vector of claim 7, wherein said vector further comprises at least one nucleotide sequence encoding said guide RNA, and wherein the guide RNA comprises a CRISPR RNA comprising a CRISPR repeat, wherein said CRISPR repeat comprises a nucleotide sequence having at least 95% sequence identity to SEQ ID NO: 2.

9. The vector of claim 8, wherein the guide RNA further comprises a tracrRNA comprising a nucleotide sequence having at least 90% sequence identity to SEQ ID NO: 3.

10. The vector of claim 8 or 9, wherein said CRISPR repeat comprises the nucleotide sequence set forth as SEQ ID NO: 2.

11. The vector of claim 9 or 10, wherein said tracrRNA comprises a nucleotide sequence having at least 95% sequence identity to SEQ ID NO: 3.

12. The vector of any one of claims 9-11, wherein said tracrRNA comprises the nucleotide sequence set forth as SEQ ID NO: 3.

13. A cell comprising the nucleic acid molecule of any one of claims 1-6 or the vector of any one of claims 7-12.

14. A nucleic acid molecule comprising a polynucleotide encoding a CRISPR RNA (crRNA), wherein said crRNA comprises a spacer sequence and a CRISPR repeat, wherein said CRISPR repeat comprises a nucleotide sequence having at least 95% sequence identity to SEQ ID NO: 2;

wherein a guide RNA comprising:

a) said crRNA; and

b) a trans-activating CRISPR RNA (tracrRNA) capable of hybridizing to said CRISPR repeat of said crRNA;

is capable of hybridizing to a target DNA sequence when said guide RNA is bound to an RNA-guided nuclease (RGN) polypeptide comprising an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 1, and wherein said target DNA sequence is located 5' and adjacent to a protospacer adjacent motif (PAM) site having the sequence set forth as SEQ ID NO: 7.

15. The nucleic acid molecule of claim 14, wherein said RGN polypeptide comprises an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 1.

16. The nucleic acid molecule of claim 14 or 15, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 1.

17. The nucleic acid molecule of any one of claims 14-16, wherein said CRISPR repeat comprises the nucleotide sequence set forth as SEQ ID NO: 2.

18. The nucleic acid molecule of any one of claims 14-17, wherein said polynucleotide encoding a crRNA is operably linked to a promoter heterologous to said polynucleotide.

19. A vector comprising the nucleic acid molecule of any one of claims 14-18.

20. The vector of claim 19, wherein said vector further comprises a polynucleotide encoding said tracrRNA.

21. A nucleic acid molecule comprising a polynucleotide encoding a trans-activating CRISPR RNA (tracrRNA) comprising a nucleotide sequence having at least 90% sequence identity to SEQ ID NO: 3;

wherein a guide RNA comprising:

a) said tracrRNA; and

b) a crRNA comprising a spacer sequence and a CRISPR repeat capable of hybridizing to said tracrRNA;

is capable of hybridizing to a target DNA sequence when said guide RNA is bound to an RNA-guided nuclease (RGN) polypeptide comprising an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 1, and wherein said target DNA sequence is located 5' and adjacent to a protospacer adjacent motif (PAM) site having the sequence set forth as SEQ ID NO: 7, and

wherein said polynucleotide encoding a tracrRNA is operably linked to a promoter heterologous to said polynucleotide.

22. The nucleic acid molecule of claim 21, wherein said RGN polypeptide comprises an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 1.

23. The nucleic acid molecule of claim 21 or 22, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 1.

24. The nucleic acid molecule of any one of claims 21-23, wherein said tracrRNA comprises a nucleotide sequence having at least 95% sequence identity to SEQ ID NO: 3.

25. The nucleic acid molecule of any one of claims 21-24, wherein said tracrRNA comprises the nucleotide sequence set forth as SEQ ID NO: 3.

26. A vector comprising the nucleic acid molecule of any one of claims 21-25.

27. The vector of claim 26, wherein said vector further comprises a polynucleotide encoding said crRNA.

28. A system for binding a target DNA sequence, said system comprising:

a) one or more guide RNAs (gRNAs) capable of hybridizing to said target DNA sequence or one or more nucleotide sequences encoding the one or more gRNAs; and

b) an RNA-guided nuclease (RGN) polypeptide comprising an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 1, or a nucleotide sequence encoding the RGN polypeptide;

wherein said target DNA sequence is located 5' and adjacent to a protospacer adjacent motif (PAM) site having the sequence set forth as SEQ ID NO: 7, and

wherein the one or more gRNAs are capable of forming a complex with the RGN polypeptide in order to direct said RGN polypeptide to bind to said target DNA sequence.

29. The system of claim 28, wherein at least one of said nucleotide sequences encoding the one or more gRNAs and said nucleotide sequence encoding the RGN polypeptide is operably linked to a promoter heterologous to said nucleotide sequence.

30. The system of claim 28 or 29, wherein the target DNA sequence is within a eukaryotic cell.

31. The system of any one of claims 28-30, wherein said RGN polypeptide comprises an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 1.

32. The system of any one of claims 28-31, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 1.

33. The system of any one of claims 28-30, wherein said RGN polypeptide is nuclease dead or functions as a nickase, and wherein the RGN polypeptide is operably linked to a base-editing polypeptide.

34. The system of any one of claims 28-32, wherein said system further comprises one or more donor polynucleotides or one or more nucleotide sequences encoding the one or more donor polynucleotides.

35. A method for binding a target DNA sequence comprising delivering a system according to any one of claims 28-34 to said target DNA sequence or a cell comprising the target DNA sequence.

36. A method for cleaving and/or modifying a target DNA sequence, comprising contacting the target DNA sequence with:

a) an RNA-guided nuclease (RGN) polypeptide, wherein said RGN comprises an amino acid sequence having at least 90% sequence identity to SEQ ID NO: 1; and

b) one or more guide RNAs capable of targeting the RGN of (a) to the target DNA sequence;

wherein said target DNA sequence is located 5' and adjacent to a protospacer adjacent motif (PAM) site having the sequence set forth as SEQ ID NO: 7,

and wherein the one or more guide RNAs hybridize to the target DNA sequence, thereby directing said RGN polypeptide to bind to said target DNA sequence and cleavage and/or modification of said target DNA sequence occurs.

37. The method of claim 36, wherein said RGN polypeptide comprises an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 1.

38. The method of claim 36 or 37, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 1.

39. The method of claim 36, wherein said RGN polypeptide is nuclease dead or functions as a nickase, and wherein the RGN polypeptide is operably linked to a base-editing polypeptide.

40. The method of any one of claims 36-39, wherein said modified target DNA sequence comprises deletion or mutation of at least one nucleotide from the target DNA sequence.

41. The method of any one of claims 36-38, wherein said modified target DNA sequence comprises insertion of heterologous DNA into the target DNA sequence.

42. The method of any one of claims 36-41, wherein the target DNA sequence is within a cell.

43. The method of claim 42, wherein the cell is a eukaryotic cell.

44. The method of any one of claims 36-38, further comprising culturing the cell under conditions in which the RGN polypeptide is expressed and cleaves the target DNA sequence to produce a modified DNA sequence; and selecting a cell comprising said modified DNA sequence.