THAT WHICH IS CLAIMED:

1. A nucleic acid molecule comprising a polynucleotide encoding an RNA-guided nuclease (RGN) polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 11;

wherein said RGN polypeptide binds a target DNA sequence in an RNA-guided sequence specific manner when bound to a guide RNA (gRNA) capable of hybridizing to said target DNA sequence, and

wherein said polynucleotide encoding an RGN polypeptide is operably linked to a promoter heterologous to said polynucleotide.

2. The nucleic acid molecule of claim 1, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 11.

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

4. The nucleic acid molecule of any one of claims 1-3, wherein the RGN polypeptide is operably fused to a base-editing polypeptide.

5. The nucleic acid molecule of any one of claims 1-3, wherein the RGN polypeptide is operably fused to an effector domain.

6. The nucleic acid molecule of claim 5, wherein the effector domain is a cleavage domain, a deaminase domain, or an expression modulator domain.

7. The nucleic acid molecule of claim 5 or 6, wherein the effector domain is operably fused at the N-terminus, the C-terminus, or at an internal location of said RGN polypeptide.

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

9. The vector of claim 8, wherein said vector further comprises at least one nucleotide sequence encoding a guide RNA, and wherein the guide RNA comprises a CRISPR RNA comprising a CRISPR repeat sequence having at least 95% sequence identity to SEQ ID NO: 12.

10. The vector of claim 8 or 9, wherein the guide RNA comprises a tracrRNA having at least 95% sequence identity to SEQ ID NO: 13.

11. A cell comprising the nucleic acid molecule of any one of claims 1-7 or the vector of any one of claims 8-10.

12. 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 95% sequence identity to SEQ ID NO: 11 or a nucleotide sequence encoding the RGN polypeptide;

wherein said nucleotide sequences encoding the one or more guide RNAs and encoding the RGN polypeptide are each operably linked to a promoter heterologous to each said nucleotide sequence;

wherein the one or more guide RNAs hybridize to the target DNA sequence, and

wherein the one or more guide RNAs form a complex with the RGN polypeptide, thereby directing said RGN polypeptide to bind to said target DNA sequence.

13. The system of claim 12, wherein the target DNA sequence is within a eukaryotic cell.

14. The system of claim 12 or 13, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 11.

15. The system of claim 12 or 13, wherein said RGN polypeptide is nuclease dead or functions as a nickase.

16. The system of any one of claims 12-15, wherein the RGN polypeptide is operably linked to a base-editing polypeptide.

17. The system of claim any one of claims 12-15, wherein the RGN polypeptide is operably fused to an effector domain.

18. The system of claim 17, wherein the effector domain is a cleavage domain, a deaminase domain, or an expression modulator domain.

19. The system of claim 17 or 18, wherein the effector domain is operably fused at the N-terminus, the C-terminus, or at an internal location of said RGN polypeptide.

20. The system of any one of claims 12-19, wherein said system further comprises one or more donor polynucleotides or one or more nucleotide sequences encoding the one or more donor

polynucleotides, wherein said nucleotide sequences encoding the one or more donor polynucleotides are each operably linked to a promoter heterologous to each said nucleotide sequence.

21. An *in vitro* or *ex vivo* method for binding a target DNA sequence comprising delivering a system according to any one of claims 12-20, to said target DNA sequence or a cell comprising the target DNA sequence.

22. An *in vitro* or *ex vivo* 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 95% sequence identity to SEQ ID NO: 11; and

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

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.

23. The *in vitro* or *ex vivo* method of claim 22, wherein said RGN polypeptide comprises the amino acid sequence set forth as SEQ ID NO: 11.

24. The *in vitro* or *ex vivo* method of claim 22, wherein said RGN polypeptide is nuclease dead or functions as a nickase.

25. The *in vitro* or *ex vivo* method of any one of claims 22-24, wherein the RGN polypeptide is operably linked to a base-editing polypeptide.

26. The *in vitro* or *ex vivo* method of any one of claims 22-24, wherein the RGN polypeptide is operably fused to an effector domain.

27. The *in vitro* or *ex vivo* method of claim 26, wherein the effector domain is a cleavage domain, a deaminase domain, or an expression modulator domain.

28. The *in vitro* or *ex vivo* method of claim 26 or 27, wherein the effector domain is operably fused at the N-terminus, the C-terminus, or at an internal location of said RGN polypeptide.

29. The *in vitro* or *ex vivo* method of claim 22 or 23, wherein said modified target DNA sequence comprises insertion of heterologous DNA into the target DNA sequence.

30. The *in vitro* or *ex vivo* method of claim 22 or 23, wherein said modified target DNA sequence comprises deletion of at least one nucleotide from the target DNA sequence.

31. The *in vitro* or *ex vivo* method of claim 22 or 23, wherein said modified target DNA sequence comprises mutation of at least one nucleotide in the target DNA sequence.

32. The *in vitro* or *ex vivo* method of any one of claims 22-31, wherein the target DNA sequence is within a cell.

33. The *in vitro* or *ex vivo* method of claim 32, wherein the cell is a eukaryotic cell.

34. The *in vitro* or *ex vivo* method of claim 32 or 33, 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.