CLAIMS

What is claimed is:

1. A rAAV particle comprising nucleic acid encoding a miR-708 and nucleic acid encoding rhodopsin.

2. The rAAV particle of claim 1, wherein the nucleic acid encoding miR-708 and/or the nucleic acid encoding rhodopsin is operably linked to a promoter.

3. The rAAV particle of claim 2, wherein the promoter expresses the miR-708 and/or rhodopsin in photoreceptor cells.

4. The rAAV particle of claim 2 or 3, wherein the promoter comprises a RK promoter, an opsin promoter, or a CBA promoter.

5. The rAAV particle of claim 4, wherein i) the nucleic acid encoding miR-708 and the nucleic acid encoding rhodopsin are operably linked to one RK promoter or opsin promoter; or ii) the nucleic acid encoding miR-708 is operably linked to a first RK promoter or a first opsin promoter and the nucleic acid encoding rhodopsin is operably linked to a second RK promoter or a second opsin promoter.

6. The rAAV particle of claim 5, wherein the nucleic acid encoding miR-708 is 5' to the nucleic acid encoding rhodopsin or wherein the nucleic acid encoding miR-708 is 3' to the nucleic acid encoding rhodopsin.

7. The rAAV particle of any one of claims 1-6, wherein the nucleic acid encoding miR-708 is embedded in an intron.

8. The rAAV particle of any one of claims 1-7, wherein the nucleic acid encoding miR-708 comprises an endogenous miR-708 scaffold or a miR-155 scaffold.

9. The rAAV particle of any one of claims 1-8, wherein the nucleic acid encoding rhodopsin comprises a substitution, insertion or deletion of nucleic acid in the miR-708 target sequence or lacks the 3' UTR miR-708 target sequence, wherein the substitution, insertion or deletion reduces or prevents recognition by miR-708.

10. The rAAV particle of any one of the preceding claims, wherein the nucleic acid encoding miR-708 comprises the nucleic acid of SEQ ID NO: l, or wherein the nucleic acid encoding miR-708 comprises a nucleic acid having at least 90% identity to SEQ ID NO: l; and wherein the rhodopsin comprises the amino acid sequence of SEQ ID NO: 2, or wherein the rhodopsin comprises an amino acid sequence having at least 90% identity to SEQ ID NO:2, or wherein the nucleic acid encoding the rhodopsin comprises nucleic acid of SEQ ID NO:3, or wherein the nucleic acid encoding the rhodopsin comprises a nucleic acid having 90% identity to SEQ ID NO: 3.

11. The rAAV particle of claim 1, wherein the rAAV particle comprises a recombinant viral genome comprising a polynucleotide of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, or SEQ ID NO:27; or wherein the rAAV particle comprises a recombinant viral genome comprises a polynucleotide having at least 90% identity to SEQ ID NO:5, SEQ ID NO:6 SEQ ID NO:7, SEQ ID NO:24, SEQ ID

NO:25, SEQ ID NO:26, or SEQ ID NO:27.

12. The rAAV particle of any one of the preceding claims, wherein the rAAV particle comprises AAV1, AAV2, AAV3, AAV4, AAV5, AAV5 tyrosine mutant, AAV6, AAV7, AAV8, AAVrh8, AAVrh8R, AAV9, AAV10, AAVrh10, AAV11, AAV12, AAV2R471A, AAV2/2-7m8, AAV DJ, AAV2 N587A, AAV2 E548A, AAV2 N708A, AAV V708K, a goat AAV, AAV1/AAV2 chimeric, bovine AAV, or mouse AAV capsid rAAV2/HBoV1 serotype capsid; and wherein the rAAV vector comprises AAV1, AAV2, AAV3, AAV4, AAV5, AAV6, AAV7, AAV8, AAVrh8, AAVrh8R, AAV9, AAV10, AAVrh10, AAV11, AAV12, AAV2R471A, AAV DJ, a goat AAV, bovine AAV, or mouse AAV serotype inverted terminal repeats (ITRs).

13. The rAAV particle claim 11, wherein the rAAV particle comprises an AAV-5 capsid or an AAV-5 tyrosine mutant capsid, and wherein the vector comprises AAV2 ITRs.

14. A composition comprising the rAAV particle of any one of claims 1-13.

15. A composition comprising a first rAAV particle, wherein the first rAAV particle is the rAAV particle according to any one of claims 1-13, and a second rAAV particle comprising a rAAV vector comprising nucleic acid encoding rhodopsin.

16. Use of the rAAV particle of any one of claims 1-13 in the manufacture of a medicament for treating retinitis pigmentosa in a human, wherein the medicament is to be administered to the eye of the human, and wherein the retinitis pigmentosa is associated with a mutation in the endogenous rhodopsin gene in the human.

17. Use of the composition of claim 14 or 15 in the manufacture of a medicament for treating retinitis pigmentosa in a human, wherein the medicament is to be administered to the eye of the human, and wherein the retinitis pigmentosa is associated with a mutation in the endogenous rhodopsin gene in the human.

18. Use of the rAAV particle of any one of claims 1-13 in the manufacture of a medicament for treating endoplasmic reticulum (ER) stress in a cell of a human, wherein the ER stress is associated with a mutation in the endogenous rhodopsin gene in the human.

19. Use of the composition of claim 14 or 15 in the manufacture of a medicament for treating endoplasmic reticulum (ER) stress in a cell of a human, wherein the ER stress is associated with a mutation in the endogenous rhodopsin gene in the human.

20. The use of claim 18 or 19, wherein the cell is an ocular cell or a photoreceptor cell.

21. The use of claim 20, wherein the photoreceptor cell is a rod photoreceptor cell.

22. The use of any one of claims 16-20, wherein the rAAV particles are to be injected into the subretinal space of the retina of the human at one or more locations.

23. The use of any one of claims 16-20, wherein the rAAV particles are to be injected intravitreally to the human.

24. The use of any one of claims 16, 17 and 20-23, wherein the retinitis pigmentosa is autosomal dominant retinitis pigmentosa or autosomal recessive retinitis pigmentosa.

25. The use of any one of claims 16-24, wherein a first rAAV particle encoding the miR-708 and a second rAAV particle encoding rhodopsin are to be administered to the human at the same time or the first rAAV particle encoding the miR-708 and the second rAAV particle encoding the rhodopsin are to be administered to the human sequentially.

26. The use of any one of claims 16-25, wherein the human has a P23H mutation in the endogenous rhodopsin gene.