WHAT IS CLAIMED IS:

1. A method for targeting a specific population of mammalian neurons for activatable expression of a gene product in the central nervous system of a mammal, comprising administering to the mammal i) an amount of a first composition comprising a first viral vector comprising a conditionally activatable gene or gene product, and ii) an amount of a second composition comprising a second viral vector comprising an open reading frame for expressing a gene, the product of which activates the gene in the viral vector, effective to allow for expression of the gene or gene product in the first viral vector in the specific population of neurons in the mammal relative to a mammal not administered the first and second viral vector.

2. The method of claim 1 wherein the first vector is systemically administered and focused ultrasound is employed to target the specific population of neurons.

3. The method of claim 1 wherein the first vector is locally administered.

4. The method of any one of claims 1 to 3 wherein the second vector is systemically administered and focused ultrasound is employed to target the specific population of neurons.

5. The method of any one of claims 1 to 3 wherein the second vector is locally administered.

6. The method of any one of claims 1 to 5 wherein the first viral vector is a retrograde viral vector.

7. The method of any one of claims 1 to 5 wherein the second viral vector is a retrograde viral vector.

8. The method of any one of claims 1 to 7 wherein the first vector is administered before the second vector.

9. The method of any one of claims 1 to 7 wherein the second vector is administered before the first vector.

10. The method of any one of claims 1 to 9 wherein one of the vectors is targeted to a structure in the brain of the mammal to be modulated which contains axons from regulatory neurons, and the other vector is targeted to a different region of the brain containing a subset of the cell bodies that send the axons to the structure to be modulated.

11. The method of any one of claims 1 to 10 wherein at least one of the viral vectors comprises an adeno-associated virus, adenovirus, canine adenovirus, herpes simplex virus, or lentivirus vector.

12. The method of any one of claims 1 to 10 wherein one of the viral vectors comprises a retrograde form of adeno-associated virus, lentivirus or canine adenovirus.

13. The method of any one of claims 1 to 12, wherein the first viral vector contains recognition sites capable of recombination and activation of the gene in the first vector and the second vector encodes a recombinase that is specific for the recognition sites.

14. The method of claim 13 wherein the recombinase comprises Cre, PhiC31 or Flp.

15. The method of any one of claims 1 to 12 wherein the first viral vector comprises a transcriptional regulatory region that binds a transcriptional activator gene product operably linked to the gene and the second vector encodes the transcriptional activator gene product.

16. The method of any one of claims 1 to 15 wherein the activity of the gene product encoded by the first vector is activatable by an exogenous agent.

17. The method of claim 16 further comprising administering the exogenous agent to the mammal.

18. The method of any one of claims 1 to 17 wherein the gene product encoded by the first vector prevents or inhibits one or more symptoms of a neurological disease or disorder.

19. The method of any one of claims 1 to 18 wherein the administration of the two vectors to the mammal is separated by at least 24 hours.

20. The method of any one of claims 1 to 19 wherein the first vector is targeted to the striatum.

21. The method of any one of claims 1 to 20 wherein the second vector is targeted to the substantia nigra.

22. The method of any one of claims 1 to 19 wherein the second vector is targeted to the striatum.

23. The method of any one of claims 1 to 19 or 22 wherein the first vector is targeted to the substantia nigra.

24. The method of any one of claims 1 to 19 wherein the first vector is targeted to the ventral tegmental area.

25. The method of any one of claims 1 to 19 or 24 wherein the second vector is targeted to the nucleus accumbent or the medial prefrontal cortex.

26. The method of any one of claims 1 to 19 wherein the second vector is targeted to the ventral tegmental area.

27. The method of any one of claims 1 to 19 or 26 wherein the first vector is targeted to the nucleus accumbent or the medial prefrontal cortex.

28. The method of any one of claims 1 to 19 wherein the first vector is targeted to the periaqueductal gray.

29. The method of any one of claims 1 to 19 or 28 wherein the second vector is targeted to the nucleus ambiguus.

30. The method of any one of claims 1 to 19 wherein the second vector is targeted to the periaqueductal gray.

31. The method of any one of claims 1 to 19 or 30 wherein the first vector is targeted to the nucleus ambiguus.

32. The method of any one of claims 1 to 23 wherein expression of the conditionally activatable gene or gene product in the mammal prevents, inhibits or treats one or more symptoms of Parkinson's disease.

33. The method of any one of claims 1 to 23 wherein the first viral vector encodes a G-protein coupled receptor.

34. The method of any one of claims 24 to 27 wherein expression of the conditionally activatable gene or gene product in the mammal inhibits or treats depression or drug addiction.

35. The method of any one of claims 28 to 31 wherein expression of the conditionally activatable gene or gene product in the mammal prevents, inhibits or treats speech or swallowing dysfunction.

36. The method of any one of claims 1 to 35 wherein the mammal is a human.

37. A method for targeting a specific population of mammalian neurons for activatable expression of a gene product in the central nervous system of a mammal, comprising administering to a mammal an amount of a composition comprising a viral vector comprising a conditionally activatable gene or gene product, wherein the mammal comprises a vector comprising an open reading frame for expressing a gene, the product of which activates the gene in the viral vector, wherein the amount is effective to allow for expression of the gene or gene product in the viral vector in the specific population of neurons in the mammal.

38. A method for targeting a specific population of mammalian neurons for activatable expression of a gene product in the central nervous system of a mammal, comprising administering to the mammal an amount of a composition comprising a viral vector comprising an open reading frame for a gene, the product of which activates a conditionally activatable gene or gene product, wherein the mammal comprises a vector comprising the conditionally activatable gene or gene product, wherein amount is effective to allow for expression of the gene or gene product in the viral vector in the specific population of neurons in the mammal.

39. Use of a first viral vector comprising a conditionally activatable gene or gene product and a second viral vector comprising an open reading frame for expressing a gene, the product of which activates the gene in the viral vector, to prevent, inhibit or treat one or more symptoms of a neurological disease.