WHAT IS CLAIMED IS:

1. Compound A for use in treating anhedonia in a human in need thereof, comprising administering a therapeutically effective amount of Compound A to the human;

wherein Compound A is *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide.

2. Compound A for use in reversing hyperactivity in the ventral tegmental area (VTA) in a human in need thereof, comprising administering an effective amount of Compound A to the human;

wherein Compound A is *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide; and

wherein the human is suffering from anhedonia.

3. The Compound A for use of claim 1 or 2, which comprises enhancing the opening of a Kv7 potassium channel in the human.

4. Compound A for use in enhancing the opening of a Kv7 potassium channel in a human, comprising administering an effective amount of Compound A to the human;

wherein Compound A is *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide; and

wherein the human is suffering from anhedonia.

5. The Compound A for use of claim 3 or claim 4, wherein the Kv7 potassium channel is one or more of Kv7.2, Kv7.3, Kv7.4, or Kv7.5.

6. The Compound A for use of claim 5, which is selective for enhancing the opening of one or more of Kv7.2, Kv7.3, Kv7.4, or Kv7.5 over Kv7.1.

7. The Compound A for use of claim 3 or claim 4, which comprises opening of the Kv7.2/Kv7.3 (KCNQ2/3) potassium channel.

8. The Compound A for use of any one of claims 1-7, wherein the anhedonia comprises sexual anhedonia.

9. The Compound A for use of any one of claims 1-7, wherein the anhedonia comprises social anhedonia.

10. The Compound A for use of any one of claims 1-7, wherein the anhedonia is a symptom of a neuropsychiatric disorder.

11. The Compound A for use of claim 10, wherein the neuropsychiatric disorder is a depressive disorder, substance-related disorder, psychotic disorder, personality disorder, epileptic disorder, or a combination thereof.

12. The Compound A for use of claim 11, wherein the neuropsychiatric disorder is a depressive disorder.

13. The Compound A for use of claim 12, wherein the depressive disorder is stress-induced depression, major depressive disorder (MDD), post-traumatic stress disorder (PTSD), disruptive mood dysregulation disorder, persistent depressive disorder, bipolar spectrum disorder, bipolar depression, postpartum depression, premenstrual dysphoric disorder (PMDD), seasonal affective disorder (SAD), atypical depression, treatment-resistant depression (TRD), depression associated with agitation or anxiety, adjustment disorder with depressed mood, prolonged depressive reaction, or a combination thereof.

14. The Compound A for use of claim 12, wherein the depressive disorder is MDD.

15. The Compound A for use of claim 11, wherein the neuropsychiatric disorder is a substance-related disorder.

16. The Compound A for use of claim 15, wherein the substance-related disorder comprises a dependency on alcohol, cocaine, opioids, or nicotine.

17. The Compound A for use of claim 10, wherein the neuropsychiatric disorder is schizophrenia, extrapyramidal disorder, Alzheimer's disease, dementia, Parkinson's disease, schizoaffective disorder, schizotypal disorder, obsessive-compulsive disorder, PTSD, anorexia nervosa, panic disorder, attention deficit hyperactivity disorder (ADHD), or dysthymic disorder.

18. The Compound A for use of claim 10, wherein the neuropsychiatric disorder is an epileptic disorder.

19. The Compound A for use of claim 18, wherein the epileptic disorder is epilepsy, chronic headache including chronic migraine with or without aura, migraine aura without headache, chronic tension headache, hemicranias continua, new daily persistent headache, post stroke, dementia, multiple sclerosis, cancer, chronic pain, HIV/AIDs, lupus, or hypothyroidism.

20. The Compound A for use of any one of claims 1-19, wherein Compound A is orally administered to the human.

21. The Compound A for use of any one of claims 1-20, wherein Compound A is administered at a dose of 2 to 200 mg to the human.

22. The Compound A for use of claim 20, wherein Compound A is administered at a dose of 5 to 100 mg to the human.

23. The Compound A for use of claim 20, wherein Compound A is administered at a dose of 5 to 80 mg to the human.

24. The Compound A for use of claim 20, wherein Compound A is administered at a dose of 5 to 40 mg to the human.

25. The Compound A for use of any one of claims 1-20, wherein Compound A is administered at a dose of at least 5 mg to the human.

26. The Compound A for use of claim 25, wherein Compound A is administered at a dose of at least 10 mg to the human.

27. The Compound A for use of claim 25, wherein Compound A is administered at a dose of at least 20 mg to the human.

28. The Compound A for use of any one of claims 1-20, wherein Compound A is administered at a dose of 5-1000 mg per day or per week to the human.

29. The Compound A for use of claim 28, wherein Compound A is administered at a dose of 5-500 mg per day or per week to the human.

30. The Compound A for use of claim 28, wherein Compound A is administered at a dose of 5-250 mg per day or per week to the human.

31. The Compound A for use of claim 28, wherein Compound A is administered at a dose of 5-150 mg per day to the human.

32. The Compound A for use of claim 28, wherein Compound A is administered at a dose of 100 mg per day to the human.

33. The Compound A for use of any one of claims 1-32, wherein Compound A is administered at a dose of 0.05-20 mg/kg to the human.

34. The Compound A for use of claim 33, wherein Compound A is administered at a dose of 0.1-5 mg/kg to the human.

35. The Compound A for use of any one of claims 1-34, wherein Compound A is orally administered to the human from between about 30 minutes before to about 2 hours after eating a meal.

36. The Compound A for use of claim 35, wherein Compound A is orally administered to the human during a meal or within 15 minutes after eating a meal.

37. The Compound A for use of any one of claims 1-36, wherein the anhedonia, prior to treatment with Compound A, has a severity of at least 5 as measured by the Snaith-Hamilton Pleasure Scale (SHAPS).

38. The Compound A for use of claim 37, wherein the anhedonia, prior to treatment with Compound A, has a severity of at least 9 as measured by SHAPS.

WHAT IS CLAIMED IS:

1. Use of *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide in the manufacture of a medicament for treating anhedonia in a human in need thereof.

2. Use of *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide in the manufacture of a medicament for reversing hyperactivity in the ventral tegmental area (VTA) in a human in need thereof,

wherein the human is suffering from anhedonia.

3. The use of claim 1 or 2, wherein administration of the medicament enhances the opening of a Kv7 potassium channel in the human.

4. Use of *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide in the manufacture of a medicament for enhancing the opening of a Kv7 potassium channel in a human,

wherein the human is suffering from anhedonia.

5. The use of claim 3 or claim 4, wherein the Kv7 potassium channel is one or more of Kv7.2, Kv7.3, Kv7.4, or Kv7.5.

6. The use of any one of claims 1-5, wherein the anhedonia comprises:

(a) sexual anhedonia; or

(b) social anhedonia.

7. The use of any one of claims 1-6, wherein the anhedonia is a symptom of a neuropsychiatric disorder.

8. The use of claim 7, wherein the neuropsychiatric disorder is a depressive disorder, substance-related disorder, psychotic disorder, personality disorder, epileptic disorder, or a combination thereof.

9. The use of claim 8, wherein the neuropsychiatric disorder is a depressive disorder.

10. The use of claim 9, wherein the depressive disorder is stress-induced depression, major depressive disorder (MDD), post-traumatic stress disorder (PTSD), disruptive mood dysregulation disorder, persistent depressive disorder, bipolar spectrum disorder, bipolar depression, postpartum depression, premenstrual dysphoric disorder (PMDD), seasonal affective disorder (SAD), atypical depression, treatment-resistant depression (TRD), depression associated with agitation or anxiety, adjustment disorder with depressed mood, prolonged depressive reaction, or a combination thereof.

11. The use of claim 9, wherein the depressive disorder is MDD.

12. The use of claim 7, wherein the neuropsychiatric disorder is a substance-related disorder.

13. The use of claim 12, wherein the substance-related disorder comprises a dependency on alcohol, cocaine, opioids, or nicotine.

14. The use of claim 7, wherein the neuropsychiatric disorder is schizophrenia, extrapyramidal disorder, Alzheimer's disease, dementia, Parkinson's disease, schizoaffective disorder, schizotypal disorder, obsessive-compulsive disorder, PTSD, anorexia nervosa, panic disorder, attention deficit hyperactivity disorder (ADHD), or dysthymic disorder.

15. The use of claim 7, wherein the neuropsychiatric disorder is an epileptic disorder.

16. The use of claim 15, wherein the epileptic disorder is epilepsy, chronic headache including chronic migraine with or without aura, migraine aura without headache, chronic

tension headache, hemicranias continua, new daily persistent headache, post stroke, dementia, multiple sclerosis, cancer, chronic pain, HIV/AIDs, lupus, or hypothyroidism.

17. The use of any one of claims 1-16, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be orally administered to the human.

18. The use of any one of claims 1-17, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be administered to the human at a dose of:

(a) 2 to 200 mg;

(b) 5 to 100 mg;

(c) 5 to 80 mg; or

(d) 5 to 40 mg.

19. The use of any one of claims 1-17, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be administered to the human in a dosage unit of:

(a) 5 mg;

(b) 10 mg;

(c) 15 mg;

(c) 20 mg; or

(d) 25 mg.

20. The use of any one of claims 1-17, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be administered to the human at a dose of:

(a) 5-1000 mg per day or per week;

(b) 5-500 mg per day or per week; or

(c) 5-250 mg per day or per week.

21. The use of claim 20, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be administered at a dose of:

(a) 5-150 mg per day to the human; or

(b) 100 mg per day to the human.

22. The use of any one of claims 1-14, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be administered at a dose of:

(a) 0.05-20 mg/kg to the human; or

(b) 0.1-5 mg/kg to the human.

23. The use of any one of claims 1-22, wherein the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide is to be orally administered to the human:

(a) from between about 30 minutes before to about 2 hours after eating a meal; or

(b) during a meal or within 15 minutes after eating a meal.

24. The use of any one of claims 1-23, wherein the anhedonia, prior to treatment with the *N*-[4-(6-fluoro-3,4-dihydro-1*H*-isoquinolin-2-yl)-2,6-dimethylphenyl]-3,3-dimethylbutanamide, has a severity of at least:

(a) 5 as measured by the Snaith-Hamilton Pleasure Scale (SHAPS); or

(b) 9 as measured by SHAPS.