#### List of Category

# A. Cellular and Molecular Mechanisms of Excitability and Neural Functions

- 1. Ion Channels and Excitable Membranes
- 2. Neurotransmitters, Gliotransmitters, and Modulators
- 3. Receptors and Transporters
- 4. Synapse
- 5. Synaptic Plasticity
- 6. Signal Transduction and Modulation
- 7. Axonal Transport and Cytoskeleton
- 8. Myelination and Myelin-Axon Interaction
- 9. Blood-Brain Barrier
- 10. Gene Regulation and Epigenetics
- 11. Regulation and Function of RNA, Translational Regulation
- 12. Posttranslational Modulation and Proteolysis
- 13. Drug Development
- 14. Others

#### B. Development and Regeneration

- 15. Induction and Pattern Formation
- 16. Stem Cells, Neuronal and Glial Production/Differentiation
- 17. Cell Migration and Layer/Nuclear Formation
- 18. Axonal/Dendritic Growth and Circuit Formation
- 19. Trophic Factors and Cytokines
- 20. Axonal Regeneration and Tissue Repair
- 21. Neuronal Death and Apoptosis
- 22. Adult Neurogenesis
- 23. Evolution
- 24. Tissue Engineering and Transplantation
- 25. Others

# C. Sensory and Motor Systems

- 26. Kinematics and EMG
- 27. Spinal cord Motor Neurons and Muscle
- 28. Posture and Gait
- 29. Rhythmic Motor Pattern Generation
- 30. Cerebellum

- 31. Basal Ganglia
- 32. Voluntary movements
- 33. Oculomotor System
- 34. Sensori-Motor Plasticity
- 35. Visual System
- 36. Auditory and Vestibular Systems
- 37. Olfaction, Taste, Chemical Senses
- 38. Somatosensory System
- 39. Viscerosensory System
- 40. Pain, Itch and Their Disorders
- 41. Multisensory
- 42. Others

#### D. Homeostatic and Neuroendocrine Systems

- 43. Autonomic Nervous System
- 44. Neuroendocrine System
- 45. Neuroimmunology
- 46. Stress
- 47. Reproduction
- 48. Metabolism and Regulation of Food Intake
- 49. Others

# E. Behavior and Cognition

- 50. Instinctive Behavior
- 51. Sleep and Biological Rhythms
- 52. Motivation and Emotion
- 53. Reward and Decision Making
- 54. Attention and Perceptual Integration
- 55. Spatial and Temporal Cognition
- 56. Learning and Long-term Memory
- 57. Working Memory and Executive Function
- 58. Social Behavior
- 59. Language
- 60. Development of Cognition
- 61. Aging of Cognition
- 62. Others

#### F. Disorders of the Nervous System

- 63. Alzheimer's Disease, Other Dementia, Aging
- 64. Parkinson's Disease and Related Disorders
- 65. Polyglutamine Diseases, ALS, SCD, Other Neurodegenerative Disorder
- 66. Myopathy, Neuromuscular Disorder, Neuropathy, Spinal Disease
- 67. Demyelinating Disorders
- 68. Neuroprotection, Neurotoxicity and Neuroinflammation
- 69. Epilepsy, Headache, Vertigo
- 70. Schizophrenia
- 71. Mood Disorders
- 72. Anxiety Disorders
- 73. Drug Addiction and Abuse
- 74. Neurodevelopmental Disorders
- 75. Other Psychiatric Disorders
- 76. Cerebrovascular Disease and Ischemia
- 77. Injury
- 78. Neuro-oncology
- 79. Behavioral Pharmacology
- 80. Others

# G. Modeling, Hardware Implementation, and Applications

- 81. Neural Network Modeling
- 82. Neuroinformatics
- 83. Learning Theory
- 84. Neuronal Data Analysis
- 85. Neuroengineering
- 86. Hardware Implementation
- 87. BMI/BCI
- 88. Image/Sound Processing
- 89. Robotics
- 90. Large Scale Simulation
- 91. Other Applications

#### H. Methodology

- 92. Molecular, Biochemical, and Genetic Techniques
- 93. Genome Informatics, Proteomics, and Systems Biology
- 94. Staining, Tracing, and Imaging Techniques

- 95. Optical methods
- 96. Optogenetics
- 97. Electrophysiology
- 98. Others

# I. Others

- 99. Neuroethics
- 100. Social and Legal Issues of Neuroscience
- 101. History, Education and Outreach
- 102. Industrial Application
- 103. Others