Docket #: S10-330

Animal Model of Anxiety

Researchers in Prof. Karl Deisseroth's laboratory have used optogenetic tools to develop an animal model for anxiety by precisely identifying, creating, resolving, and targeting defined neural circuit elements. These rodents can be made to instantaneously transition into and out of a symptomatic state and could be used for research and therapeutic development.

Related Optogenetics Inventions
The Deisseroth Laboratory has developed a wide variety of optogenetics tools, including opsin genes, medical devices, animal models, and screens. Additional information on these technologies can be found by clicking on the “more technologies from Karl Deisseroth” link below.

Applications

- **Research tool** - platform for studying anxiety (to identify phenotypes, endophenotypes and treatment targets)
- **Screening** - to identify new targets and treatments for anxiety disorders

Advantages

- **Precise control** of behavior
- **Less laborious, less expensive, and less variable** than current models

Patents

- Published Application: 20130295015
- Published Application: 20150174244
- Published Application: 20160303192

- Published Application: 20180333456
- Issued: 9,968,652 (USA)

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