Washington University in St. Louis
Office of Technology Management

T-020639 USING FLUORESCENCE LIFETIME TO MEASURE NEUROMODULATOR DYNAMICS OVER TRANSIENT AND CHRONIC TIME SCALES

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Technology Description

Researchers at Washington University in St. Louis have developed a novel method that uses fluorescence lifetime to simultaneously record, and measure neuromodulator change over transient and chronic time scales, promising to reveal the roles of multi-time scale neuromodulator dynamics in diseases, in response to therapies, and across development and aging.

Publications

Ma P, Chen P… Chen Y. Fast and slow: Recording neuromodulator dynamics across both transient and chronic time scales. Sci Adv. 2024 Feb 23.

Applications

- **Can help improve the design of therapies that target the relevant features of neuromodulator dynamics**

Key Advantages

- **Simultaneously measures neuromodulator change over transient and chronic time scales**

Patents

Patent application filed

Related Web Links – Yao Chen profile; Chen lab