

## Quantitative Sensor to Measure Cellular Metabolism

**Track Code:** 2019-TANT-68703

**Categories:**

- Biotechnology
- Chemistry and Chemical Analysis

**Keywords:**

- Biochemistry
- Biology
- Cancer
- Cancer Screening
- Cancer Therapy
- Cell Biology
- Cells
- Chemistry and Chemical Analysis
- Chemotherapy
- Fluorescence
- Fluorescent Dyes
- Gene & Cell Therapy
- Luminescence
- Measurements
- Metabolomics
- Molecular Biology
- Photons
- Probes
- Proteins
- Research Tools
- Sensors

Researchers at Purdue University have developed a protein-based, genetically-encoded bioluminescent sensor that can report changes in intracellular ATP in live cells. This new sensor could be very useful for research purposes in cancer biology to measure cell health and chemotherapeutic drug efficacy.

**Advantages:**

- Measurement is independent of bioluminescence decay
- Precisely quantifies cell health and metabolism

**Potential Applications:**

- High throughput drug discovery

-Life animal imaging

**People:**

- Tantama, Mathew (Project leader)
- Min, Se-Hong

**Intellectual Property:**

**Application Date:** June 16, 2020

**Type:** Utility-Gov. Funding

**Country of Filing:** United States

**Patent Number:** (None)

**Issue Date:** (None)

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