



**News Release**

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# New Biosensors Advance Personalized Cancer Care

Washington, D.C.—In a breakthrough that could reshape the future of cancer care, Nanocrine—a Maryland-based biotech startup—has unveiled its RT-Chip™ technology, a next-generation biosensor platform that enables real time observation of tumor activity at the cellular level.

“We have overcome a major obstacle in cancer treatment: the inability to monitor how tumor cells interact and respond to therapies in real time,” said Nanocrine President/Chief Science Officer Patrick Calhoun, Ph.D. “Compatible with standard lab microscopes, the RT-chip's ability to capture a tumor’s biologic signature means that therapies can be tailored with unprecedented precision.”

Nanocrine’s biochip—initially developed by scientists at the U.S. Naval Research Laboratory--was advanced by collaborations with scientists at the National Institutes of Health and the Frederick Innovative Tech Center (FITCI)--a leading biotech incubator. Nanocrine’s findings will be published at the American Society for Cell Biology annual conference Dec. 6<sup>th</sup> in Philadelphia.

“This breakthrough is poised to transform the way cancer—and other major diseases—are diagnosed, managed and treated,” said Kathie Callahan Brady, FITCI’s President/CEO and Nanocrine advisor.

Dr. Calhoun said the imaging platform will enable researchers and clinicians to:

- Diagnose cancer more quickly and accurately by uncovering the tumors spread at the molecular level

- Map drug responses in real time on a cellular level that traditional assays miss
- Track how immune cells and engineered therapies interact with cancer cells to improve personalized immunotherapy treatments
- Identify new biomarkers linked to metastasis and immune resistance, paving the way for more effective, targeted treatments

Dr. Calhoun also announced the launch of Nanocrine's Tumor Profiler services to enable researchers to assess differences in therapeutic responses at the cellular level.

"With this technology, we finally have the potential to know what human cells are signaling to each other before it's too late to do anything about it. This can put drug development for known or unknown diseases into a new frontier of research and beyond," said The Honorable Tommy G. Thompson, former Wisconsin Governor, US Department of Health & Human Services Secretary, and a member of Nanocrine's Advisory Council.

Researchers in biopharma, academia, and contract research organizations are all seeking faster, more reliable tools to accelerate drug discovery and improve patient outcomes.

"The race to unlock the secrets inside malignancies just got a powerful new tool," said Nanocrine spokesman Ken Wolf, a metastatic cancer survivor. "This development advances the new era of precision oncology—where cancer is no longer seen as a disease of rogue cells, but as a complex, communicative ecosystem that can finally be better understood."

Nanocrine said it is also using its proprietary biosensor imaging platform to launch a suite of new products for other disease areas, from wound healing to neurodegeneration.

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