



SBIR Success Story

BioTrackers, Inc.

Charlotte, NC

US EPA SBIR Grant allows BioTrackers to conduct critical pilot study.

BioTrackers, Inc. in Charlotte was awarded a Phase I SBIR grant for \$70,000 from the US EPA in March for their proposal entitled “Use of genetically modified organism to assess sewer line integrity.” The proposal describes the use of a genetically modified strain of *Escherichia coli* to determine if there are leaks in sewer lines. The funding will allow BioTrackers to conduct a pilot study of their microbe tracking method. In the pilot study, *E. coli* cells carrying on its chromosome a gene encoding for green fluorescent protein will be introduced into sewer lines that are known to be leaking. The ability to detect and track the genetically-tagged cells outside of the sewer line will be determined. According to Todd Steck, PhD, founder and President of BioTrackers, Inc., “The Phase I SBIR provides critical funding that will allow us to complete this important pilot study. Results from this pilot study will allow us to determine the range of commercial uses for this GMO-based bacteria tracking method and allow us to secure additional funding.” This SBIR award is the first Phase I grant received by BioTrackers, Inc., a company formed in 2003 to commercialize the genetically-modified organism and its ability to be detected in the field.

The creation of BioTrackers, Inc. was based on the recognition that there is a demand for better methods to track bacteria in the field. According to Dr. Steck, this method could allow regulatory agencies to satisfy mandates in the Clean Water Act that require agencies to remediate bacterial-polluted surface water systems. Currently, there are no demonstrated methods that allow the source of bacterial pollution to be accurately determined, an essential first step in developing a remediation plan. Spiking putative pollution sources with the GMO, and then detecting the GMO in a nearby water body, would unambiguously allow one to determine the extent to which a point source is contributing to bacterial pollution. “That the natural *E. coli* strain carries a unique genetic signature will allow us to unambiguously determine the movement, longevity, and physiological status of bacteria in the environment,” Dr. Steck noted. The GMO and the method of detection are currently under patent review.

“The Phase I SBIR provides critical funding that will allow us to complete this important pilot study”

***Dr. Steck
Founder, BioTrackers***

This new company currently has two employees and is based at the Millennium Campus of UNC Charlotte. For more information, contact Dr. Todd Steck at BioTrackers, Inc., 12606 Peyton Court, Charlotte, NC 28262 (704.763.2025).

Key Links via SBIRWorld.com

<http://www.sbirworld.com/links.asp?mnuLinks=1>

Includes links for several categories of resources including:

- ◆ **Business Development**
- ◆ **Financing**
- ◆ **SBIR information**