



# PLATYPUS TECHNOLOGIES

**Contact:**  
Tim Burland

**Location:**  
Madison, Wisconsin

**Email:**  
[tburland@platypustech.com](mailto:tburland@platypustech.com)

**Tel:**  
608.237.1274

**Website:**  
[www.platypustech.com](http://www.platypustech.com)



## Company Profile

**Industry Sector:** Life Science Research Tools

**Company Overview:** Platypus Technologies was founded in 2000 to develop sensors using liquid crystal (LC) readouts. Cell assay products emerged opportunistically during one LC project, and the company now develops both cell assays for life science research, and low-cost, high performance sensors for detection of toxic gases. The company's domain expertise of surface science, interfacial science, and life science underpins its vision of "bringing science to the surface".

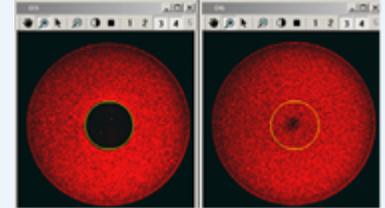
The focus of this initiative is the cell assay business. Mammalian cell migration is of central importance in cancer metastasis, immune responses, wound healing and development. Platypus "Oris™" assay kits enable researchers to monitor mammalian cell migration accurately and efficiently in industry-standard formats.

**Target Market:** Life science researchers in pharmaceutical, biotechnology, academic and government research organizations



## Key Value Drivers

**Technology\*:** Oris™ assays provide a central cell-free region in each well of a multiwell culture plate, surrounded by a seeding zone of cells. Migration across the two-dimensional (2D) surface is readily monitored.



*Left, cells (red dots) are seeded around a 2-mm central exclusion zone into which they can migrate (right).*

**Competitive Advantage:** Unlike most competitors, Oris™ assays provide real time data, accelerating methods development and providing richer data sets. Oris™ also dispenses with the artificial membranes used in competing "transwell" assays, providing more physiologically relevant data. Plus, Oris™ offers the lowest cost per data point.

**Plan & Strategy:** Platypus plans to address growing demand for assays that monitor cell movement in three dimensions (3D invasion) by bringing the benefits of the 2D Oris™ platform to 3D assay kits.



## Management

**Leadership:** Nicholas L Abbott, PhD, CEO, Founder & Director; Timothy G. Burland, PhD, COO; Walter Dewey, CFA, Director; Christopher J. Murphy, PhD, Founder & Director; Shou Wong, PhD, Director.

**Scientific Advisors:** Nicholas L Abbott, PhD, Professor of Chemical Engineering, Univ. of Wisconsin; Christopher J. Murphy, PhD, Professor of Ophthalmology, Univ. of California-Davis; Shou Wong, PhD, Technology Platform Leader, Dow Chemical; Andreas Friedl, MD, Professor of Pathology & Lab Medicine, Univ. of Wisconsin; David Beebe, PhD, Professor of Biomedical Engineering, Univ. of Wisconsin.



## Product Pipeline

**1. Pipeline One:** Based on progress made during Phase I of an SBIR-funded project, Platypus released the Oris™ 3D Embedded Invasion Assay. This product is designed for basic researchers who need modest throughput and maximum assay flexibility for 3D invasion research. Sales initiatives for this assay will aid sales of the next product.

**2. Pipeline Two:** Over the next 18 months, the company plans to develop a high-throughput "Oris™ Pro" 3D invasion assay for drug discovery that is fully automated, delivering unprecedented efficiency and effectiveness in the search for drugs that promote (wound healing and immunity) or inhibit (cancer metastasis) cell invasion.