



## CELLUMEN'S 2008 COLLABORATIONS VALIDATE NEW APPROACH TO IMPROVE DRUG SAFETY AND DEVELOPMENT

### *Proprietary Cellular Systems Biology Approach to Early Identification of Toxic Compounds Attracts Leading Pharmaceutical and Agency Partners*

**Pittsburgh, PA, October 14, 2008** - Drug safety has never been a more critical, high-profile or costly issue for healthcare, but now both pharmaceutical companies and consumers can rest assured that the industry is sanctioning a new and more accurate approach to toxicity testing for drug compounds. [Cellumen, Inc.](#), a discovery toxicology company, is now in collaboration with several leading global organizations such as [Eli Lilly and Company](#), [Mitsubishi Tanabe Pharma Corporation](#), the EPA, and the FDA, to apply its innovative and proven [CellCiphr® Discovery Toxicology](#) profiling services to the early identification of toxic compounds with unprecedented precision.

Since receiving financing of \$8.7 million in July 2007 from [Safeguard Scientifics, Inc. \(NYSE: SFE\)](#), a provider of growth capital for innovative technology and life sciences companies, Cellumen has secured these collaborations based upon the unique Cellular Systems Biology (CSB) approach used in its CellCiphr profiling services. Cellumen's CSB approach treats a cell as an integrated and interacting network of genes, proteins and metabolites that gives rise to normal or abnormal functions. In turn, CellCiphr screens compounds through 10 or more cellular features, instead of just a few features like most existing toxicity assays in the industry. That way, Cellumen can categorize compounds with a Safety Risk Index, giving its customers unparalleled access to mechanisms of toxicity and relative safety risk.

Cellumen's toxicity profiling service may be applied from late primary screening through early pre-clinical phases, and before entering expensive pre-clinical testing where the pharmaceutical industry is currently losing significant capital from drugs failing FDA approval due to late identification of safety issues. Through CellCiphr, Cellumen's customers have the opportunity to achieve cost savings in excess of tens of millions of dollars per year by accurately identifying and eliminating compounds that result in toxic liabilities. Currently, this magnitude of cost savings is not realized by any other means.

Cellumen's most recent collaborations include:

- [Eli Lilly and Company \(NYSE: LLY\)](#) – Collaborative partnership in which Lilly sends its new drug series compounds to Cellumen for evaluation through CellCiphr. Cellumen's reports will prove invaluable as Lilly moves forward in developing pharmaceutical products that address major treatments in depression, schizophrenia, attention-deficit hyperactivity disorder, diabetes, osteoporosis and many other conditions.
- [Mitsubishi Tanabe Pharma Corporation \(4508:JP\)](#) – Agreement with MTPC, one of the leading pharmaceutical companies in Japan, to develop panels of biomarkers that identify toxicity early in the drug development process.
- [National Center for Toxicology Research \(NCTR\)](#) – Research collaboration with the NCTR, a research center of the Food and Drug Administration (FDA), to apply CellCiphr to profile blinded samples of known liver toxicity compounds including both failed and marketed drugs.
- [Alzheimer's Drug Discovery Foundation \(ADDF\)](#) – Agreement with the ADDF to apply Cellumen's CSB technology to create a cellular model of Alzheimer's Disease that reveals the activity of multiple targets and pathways implicated in an intact, functioning cellular system.

“Conventional biochemical and high content screening toxicity assays simply do not have the statistical sensitivity required to help pharmaceutical companies prioritize their lead series among compounds that have more subtle toxic liabilities, and ultimately improve drug safety for consumers,” stated [D. Lansing Taylor](#), PhD, CEO of Cellumen. “Our collaborations with some of the top pharmaceutical, governmental and research organizations in the world validate that Cellumen’s Cellular Systems Biology approach and CellCiphR toxicity assessment services have earned the confidence of the brightest minds in the healthcare industry as an innovative and more accurate approach to predicting drug efficacy and safety. We look forward to working with these partners to help prioritize which of their new compounds will continue in the development cycle.”

### **About Cellumen**

Cellumen is the leading innovator in Cellular Systems Biology (CSB™) solutions providing the most accurate predictions of drug efficacy and safety, thus reducing failure rates and cutting development costs. Cellumen’s CSB solutions are driving Discovery Toxicology by addressing the full complexity of disease and safety. Leading global organizations, such as the Mayo Clinic, the EPA, FDA, NIH and top pharmaceutical companies, partner with Cellumen. Cellumen is a partner company of [Safeguard Scientifics](#). Other investors include [Novitas Capital](#), the [Pittsburgh Life Sciences Greenhouse](#) and [Innovation Works](#). For more information about Cellumen, please visit [www.cellumen.com](http://www.cellumen.com).

### **Cellumen Media Contact**

Theresa Murray

Gregory FCA

610-642-8253 x164

Theresa@GregoryFCA.com