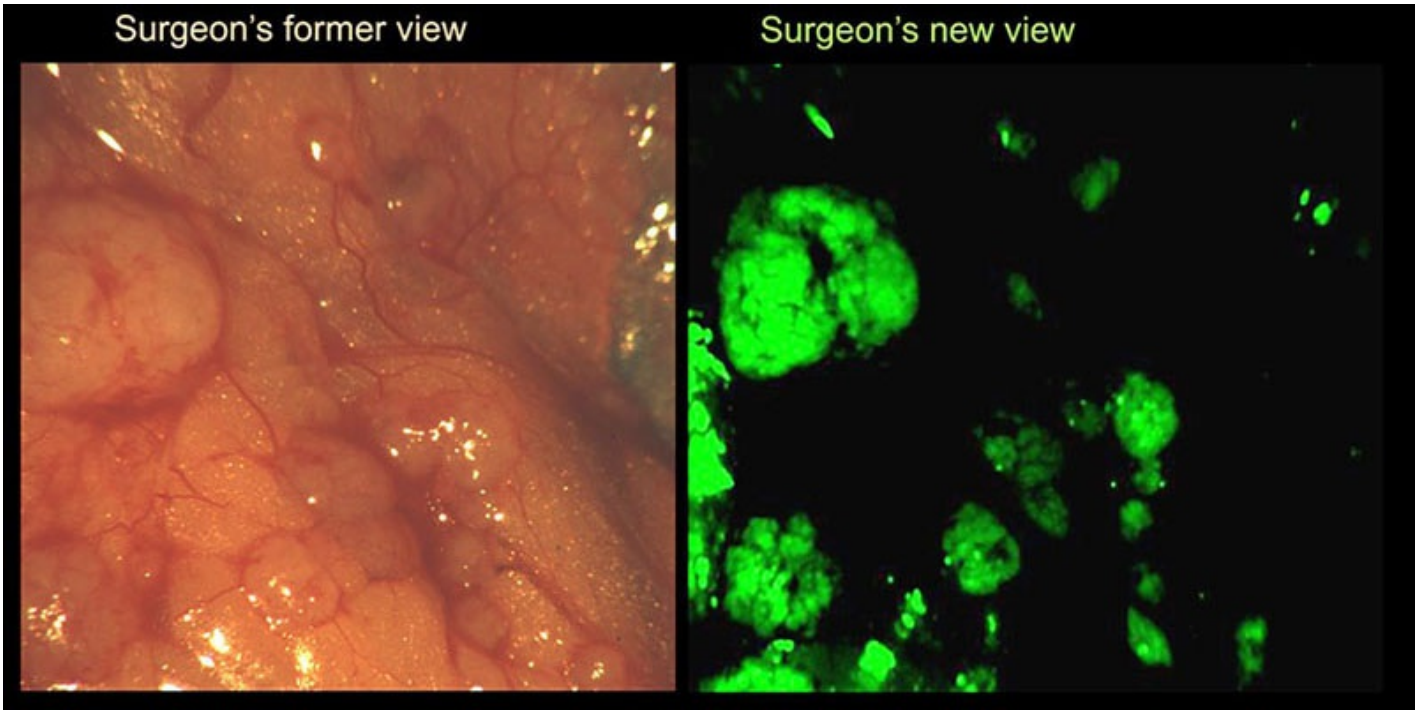
Shedding Light On Cancer Surgery And Treatment



Phil Low, Ralph C. Corley Distinguished Professor of Chemistry at Purdue University, is working to revolutionize cancer treatment by developing several 'cancer-lighting' molecules. Low and his team of researchers in West Lafayette, IN, developed fluorescent molecular markers of a near-infrared dye and a targeting molecule, or ligand, that binds to folate receptors overexpressed on cancer cells, designed to illuminate the cancerous lesions, lighting the way for the resection of malignant tissue. The goal is surgeons feeling even more confident in pursuit of a complete surgical resection for their patients.

Surgically removing the cancerous lesion remains widely used and is effective at preventing recurrence of the disease. Yet the methods currently used to identify malignant tissue are limited – skilled surgeons often rely only on preoperative imaging and real-time visual and tactile cues. Moreover, 40% of cancers recur in the original site of the surgery because surgeons might miss a microscopic cluster of 10 or 20 cells that cannot be seen during a normal procedure.

> *"If the surgeon can see it all, they can easily remove it. My hope is to develop tumor targeted fluorescent dyes to every cancer known to man," Low said.*

One such novel fluorescent compound, pafolacianine sodium (OTL38) was recently approved by the US Food and Drug Administration (FDA). The drug is released in the market by On Target Laboratories under the brand name of "Cytalux." Cytalux is the first Purdue University invented and patented drug approved by the FDA.

This technology is licensed through the Purdue Research Foundation (PRF) Office of Technology Commercialization (OTC) to On Target Laboratories, of which Low is a co-founder and Chief Scientific Officer. The revolutionary fluorescent imaging technology is supported by a robust patent portfolio: five U.S. patents issued and dozens more filed and pending around the world. Several of the initial patents were filed and assigned to the PRF-OTC.

The OTC is managed by the PRF, which protects Purdue's intellectual property and promotes entrepreneurial ventures, and manages the Purdue Foundry, a hub for practical entrepreneurial support in starting companies and the Purdue Research Park, the largest university affiliated business incubation complex in the U.S. The entire PRF ecosystem helps in successful commercialization of Purdue technologies and startups, including On Target Labs.

On Target Laboratories is a privately held biotechnology company that has successfully raised more than $81 million, backed by the Purdue Foundry and investors such as Johnson & Johnson Innovation, among other public and private funding.

Learn more about OTL38 clinical trials on ovarian cancer and lung cancer.

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