3D Printed Parts for Microfluidic Molds (PRL EAP.COM)

Potomac Photonics has partnered with many companies and universities to help them develop and manufacture parts that are being used in both cancer research and therapy. A recent project for Sloan Kettering Institute included a 3D printed mold fabricated by Potomac Photonics. The new method for microfabrication of this integral part eased a bottle neck in the research process.

According to Maxime Deforet, the Program Director at Sloan Kettering Institute, "These Acrylic 3D-printed prototypes are molds, subsequently used for PDMS microfabrication. PDMS microchambers are now broadly used for biology and biomedical applications. However, development of such microfabricated devices (often based on photolithography) can be a bottleneck as it requires costly equipment and long process cycles. Acrylic 3D printing allows rapid prototyping of microfluidic assay for moderate price. In particular, the mold shown here is used to make a PDMS microchamber for cancer cell growth in a controlled environment. MSKCC provides patient care and conducts cancer research."

This project was partly funded by Potomac Photonics Educational Manufacturing Initiative which is a program, focused on creating robust partnerships with universities and research institutes in order to develop new products and manufacturing technologies.

Potomac Photonics continues to be on the front line in the fight against cancer by providing a broad range of manufacturing technologies necessary to build new weapons in the fight against cancer. In the last 12 months, Potomac has partnered with multiple companies and universities to help them develop and manufacture parts that are being used in both cancer research and therapy.

About Memorial Sloan Kettering Cancer Center

Memorial Sloan Kettering Cancer Center - the world's oldest and largest private cancer center - has devoted more than 130 years to exceptional patient care, innovative research, and outstanding educational programs. They are one of 41 National Cancer Institute–designated Comprehensive Cancer Centers, with state-of-the-art science flourishing side by side with clinical studies and treatment. For more information, visit their website at http://www.mskcc.org

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About Potomac Photonics

For over 30 years, Potomac Photonics has been a leader in microfabrication and small hole drilling.Potomac's contract services span prototyping to production, helping clients develop miniature products and bring them to market. Using cutting-edge manufacturing technology, Potomac has been recognized by both commercial and government agencies for innovation in areas such as medical device, electronics, aerospace, and automotive manufacturing. Potomac's high-tech facility, located at bwtech@UMBC Research and Technology Park , is ISO 9001 and ISO 13485 certified. Visit the website at http://www.potomac-laser.com