Press Release Sculpteo x Coastal Genomics

Paris and Vancouver, June 16, 2020

**Coastal Genomics Automates DNA Purification Process Using 3D Printing – accelerating cancer research, prenatal screening and numerous other fields by partnering with Sculpteo**



**Coastal Genomics, experts in life sciences automation, selected Sculpteo, a leader in online 3D printing and digital manufacturing, to develop unique components for an automated DNA purification process. Thanks to 3D-printed mechanical parts, it can now offer complete and customized automation of this sample preparation method.**

Over the past 25 years, advances in the field of genomics have led to a dramatic drop in the cost of DNA sequencing. Today, DNA research now faces the challenge of increasing demand in the clinical field. These applications are becoming commonplace as they can offer early insight into medical conditions.

To address the growing sample preparation needs of clinical DNA sequencing, Coastal Genomics chose online 3D printing specialist Sculpteo. Using additive manufacturing, Sculpteo supported efforts by Coastal Genomics to prototype and build components used for DNA purification. Academic laboratories, prenatal/clinical facilities and gene synthesis companies can finally benefit from complete and customized automation of this process at a scale that is compatible with the demands of a high throughput environment.

According to **Clément Moreau, CEO of Sculpteo**, “*We are very pleased to provide Coastal Genomics with the technology and project management that suits their needs and allows them to accelerate the automation of DNA purification and size selection technology. Responding to complex design and material requirements in a timely and responsive manner is at the very heart of 3D Printing! With 3D printing there is no barrier.”*

**Matthew Nesbitt, President of Coastal Genomics**, says: “*As an expert in online 3D printing and direct digital manufacturing, Sculpteo has been responsive in a critical period of product development. They were faster than anyone else, responsive to our specific needs, and were willing to engage in development to satisfy our unique manufacturing requirements. The scalability and per-unit pricing are surprisingly appealing, enabling its use in certain production situations.“*

**3D Printing for a realistic DNA sample preparation process at a wide scale**

The 3D printing process enables Coastal Genomics to design unique, detailed parts that can be quickly manufactured, at a low cost, even after multiple adjustments and customizations. Fairly complicated designs are no longer impossible! Among the advantages of using 3D printing even after entering production, Sculpteo achieves the necessary precision of the parts at a competitive price point and a rapid design turn-around time, as opposed to other techniques such as injection molding. Through Coastal Genomics' strategic decision to utilize additive manufacturing, they were granted the benefits of design freedom to iterate freely and rapidly to bring their products to market at an accelerated rate. Allowing them to bypass longer lead times and inventory management associated with choosing conventional manufacturing methods, Sculpteo also provides and adapts a specific material, SLS Nylon PA12, which is sterilizable.

Coastal Genomics' technology uses hardware and software for automation of gel-based size selection of DNA, enabling real-time manipulation of the electric field to process up to 96 samples in parallel. The technology enables a repeatable process that can scale with the demands of the clinic.

Please click [here](https://www.coastalgenomics.com/blog/product/lightbench/) to access videos of LightBench, and [here](https://www.coastalgenomics.com/blog/product/nimbus-select/) for NIMBUS Select.

**About Coastal Genomics**

Incorporated in 2012 and operational since 2013, Coastal Genomics is a team of engineers and scientists that believe good life science research should not be at the mercy of the fickle nature of bench work. While this view is not unique to us, our approach to solving the problem is. We look to automate gold standard bench protocols and consolidate other in-line processes onto single-instrument solutions. In a nutshell, we aim to contribute to the push to roboticize all laboratory work with DNA. Ranger Technology is our primary offering. It enables turnkey automation of gel-based electrophoresis for the purposes of sample preparation and quality control.

For more information: [www.coastalgenomics.com](https://www.coastalgenomics.com/about/)

**About Sculpteo**

Sculpteo, pioneer and specialist of digital manufacturing, offers a service of online 3D printing, from 3D model transfer to the order of the object, and aims to make this technology easy and accessible to all. Based in San Francisco and Paris, Sculpteo offers on-demand 3D printing and manufacturing in large scale for start-ups, SMEs and design studios. The offer of Sculpteo resembles more than 100 combinations of materials with multiple colors and finishing options, as well as a technical analysis and superior repair of files. The Sculpteo factories use professional 3D printers and laser cutters with a very fast execution and a global delivery. Sculpteo was created in 2009 by Eric Carreel and Clément Moreau. It was acquired by BASF New Business GmbH in November 2019.

For more information: [www.sculpteo.com](http://www.sculpteo.com)

**About BASF New Business**

BASF New Business GmbH (BNB) searches out long-term trends and innovative topics in industry and society as well as future markets, analyzes their growth potential and checks whether potential new business areas are suitable for BASF. Its activities are focused on the client sectors of transportation, building and construction, consumer goods, health & nutrition, electronics, agriculture, and energy & resources where new business opportunities outside existing BASF businesses are identified. BNB then progressively builds the most promising business concepts as new business areas for BASF. BNB concentrates on new chemical-based materials, technologies and system solutions, also promoting technological progress through actively driving the development of new products. To evaluate the technology and the market, BNB works closely with BASF‘s global research platforms and specialist divisions. In addition, BNB cooperates with research institutes, universities, startups and industrial partners. The subsidiary BASF Venture Capital invests directly in startups working in strategically relevant technology fields.

For more information please visit: [www.basf-new-business.com](http://www.basf-new-business.com).

**About BASF 3D Printing Solutions**

BASF 3D Printing Solutions GmbH, headquartered in Heidelberg, Germany, is a 100% subsidiary of BASF New Business GmbH. It focuses on establishing and expanding the business under the Forward AM brand with advanced materials, system solutions, components and services in the field of 3D printing. BASF 3D Printing Solutions is organized into startup-like structures to serve customers in the dynamic 3D printing market. It cooperates closely with the global research platforms and application technologies of various departments at BASF as well as with research institutes, universities, startups and industrial partners. Potential customers are primarily companies that intend to use 3D printing for industrial manufacturing. Typical industries include automotive, aerospace, and consumer goods.

For further information please visit: [www.forward-am.com](http://www.forward-am.com).

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