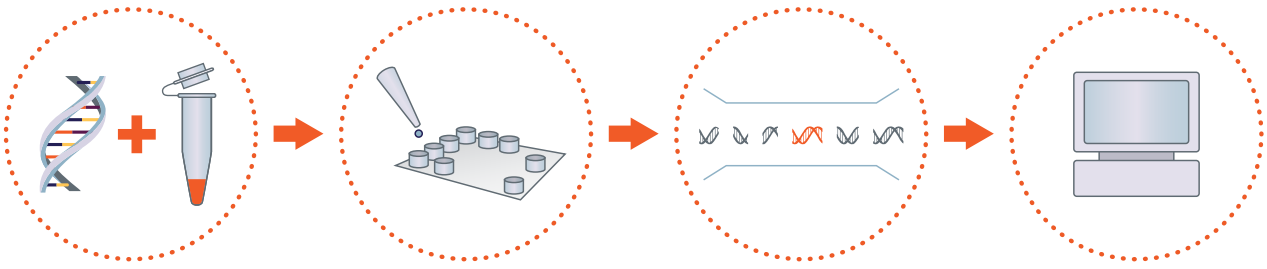
Genturi

Streamlined Workflow

Genturi's single molecule analysis technology analyzes individual molecules in a few easy steps:



Mix sample with dye stain

Load sample on nanofluidic chip and insert into reader

Read molecules one-by-one as they flow past laser

Analyze and display data

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Company Story

Recent advances in DNA sequencing technologies have revolutionized our ability to discover and analyze specific genetic mutations. While sequencing is sensitive to single nucleotide polymorphisms (SNPs) and smaller genetic variants, current approaches are unable to resolve many of the disease-causing structural variants that may be present across an individual genome. With typical read lengths of 150 bases, short-read DNA sequencing platforms provide a very limited view of these structural changes, even with the application of super-computer-scale bioinformatics analysis. So-called 'long-read' technologies only analyze on average a few tens of thousands of bases, which is a tiny fraction of intact human chromosomes that range in size from 47 million to 250 million base pairs. Peer-reviewed publications* continue to cite the need for a technology capable of extracting and analyzing entire chromosomes to detect the full spectrum of structural variation and transform our understanding of the role it plays in cellular function, disease susceptibility and disease progression.

At the lab bench, simple tasks such as fragment sizing still require the use of cumbersome techniques such as gel electrophoresis. These methods can require large amounts of input sample and, for larger DNA fragments, require run times of a full day or longer. The ability to rapidly analyze DNA from a small number of cells would remove the need for cell culturing and allow the analysis of unculturable samples, such as needle biopsies and primary cells.

Genturi Co-founders, Prof. J. Michael Ramsey and Dr. Laurent Menard at the University of North Carolina at Chapel Hill, have dedicated the last decade to developing nanofluidic approaches capable of extracting and analyzing millions of DNA molecules, one-by-one.

Technology Advantages

Genturi's nanofluidic products will have several key advantages over current methods that only provide a limited view of structural variation.

- **High capacity and scalability** – analyze thousands of individual DNA molecules in a few minutes and millions of individual molecules in a few hours
- **Broad range of DNA sizes** – detect and quantify DNA ranging in size from 100bp up to millions of base pairs
- **Minimal sample input requirements** – perform routine analysis of small numbers of cells
- **Integrated micro and nanofluidics** – minimize user operation with intuitive workflow
- **High-volume single-use consumables** – enable low overall cost per sample

Leadership Team

Genturi's leadership team combines an established track record of breakthrough scientific innovation and entrepreneurial success. The team features diverse backgrounds from leading academic institutions and genomics technology companies.

Management Team

- **J. Michael Ramsey, PhD**, *Scientific Founder and Director*
- **Laurent D. Menard, PhD**, *Scientific Co-founder and Director of Microfluidics Research*
- **Andy Watson,** *Chief Executive Officer*

Additional Directors

- **Michael Dial, PhD**, *Principal, Hatteras Venture Partners*
- **Keith L. Crandell**, *Managing Director and Co-Founder, ARCH Venture Partners*

Fast Facts

Founded: 2016

Headquarters: Woburn, MA

Markets: Basic research, applied and clinical

Financial Profile: Well capitalized with the backing of world-class investors

Website: www.Genturi.com

Contact Us

Genturi is headquartered in Woburn, MA, a growing biotech and life sciences hub just north of Boston.

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Investors

Genturi is funded by a series A investment from Arch Venture Partners, Hatteras Venture Partners, Stillwater LLC, and Eleven Two Capital.

ARCH Venture Partners

HATTERAS VENTURE PARTNERS

Eleven Two Capital

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