

## BIONANO GENOMICS WEBINAR

You're Invited!

### Next-Generation Cyto-genomics: High Resolution Chromosome Abnormality Detection with Optical Genome Mapping

Shereen Ghosh, PhD

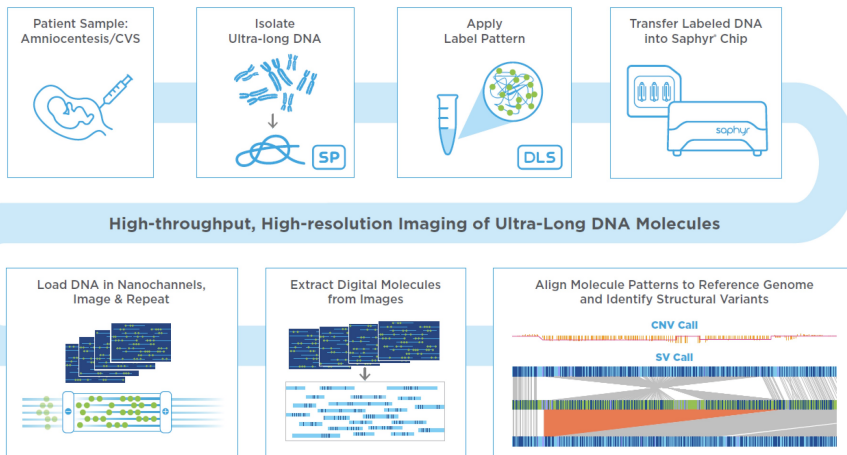
Bionano Genomics, Business Support Scientist

The diagnostic yield in genetic disease has seen very little improvement over the last few decades, despite the introduction of whole genome sequencing. Optical genome mapping solves constitutional genetic mysteries for patients with a variety of genetic disorders by detecting genomic rearrangements and structural variants missed by NGS and cytogenetic methods. The promise of personalized medicine in cancer remains elusive, because no single technology can comprehensively detect all the rearrangements in the cancer genome.

The Bionano Genomics platform for genome imaging offers an extremely long-read technology, providing unmatched sensitivity and specificity to detect structural variation, genome-wide, at low cost. Our *de novo* optical maps can resolve complex repetitive regions, identify Copy Number Variations, and elucidate genome-wide structural variation like balanced/unbalanced translocations, inversions, and indels with much higher sensitivity and precision than sequencing-based methods.

For heterogeneous cancer samples or mosaic patient cases, Bionano's extremely high coverage depth allows for the detection of any type of structural variant with more than 90% sensitivity, present in as little as 5% of the cells, genome-wide, and completely unbiased.

Examples will be presented of how Bionano's platform is helping solve genetic mysteries for patients with undiagnosed genetic disorders, and how it elucidates genomic rearrangements in cancer that are missed by NGS and cytogenetic methods.



**DATE:**

Tuesday, October 12, 2021

**TIME:**

1:00-2:00 PM EST

**LOCATION:**

Join Zoom Meeting

<https://zoom.us/j/96474383205?pwd=eGlhSk2THNoaWJOZVpma3doQ3ZpQT09>

Meeting ID: 964 7438 3205

Passcode: 813306

One tap mobile

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No RSVP necessary



For more information about the Saphyr® System, please visit [www.bionanogenomics.com](http://www.bionanogenomics.com)

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