

*The Technology Seminar Series Presents:*

**“Furthering Single Cell Ophthalmologic  
Research with Illumina Sequencing  
Technology”**

**Ryan Hegarty, Senior Sequencing Specialist – Illumina Greater Boston  
Brett Oosdyke, Territory Account Manager – Boston Health Systems**



**Thursday, June 22<sup>nd</sup>, 2023**

**12:00 – 1:00 pm**

**MEE 243 Charles Street Boston, MA, The Meltzer  
Auditorium (3<sup>rd</sup> Floor) and Zoom**

<https://masseyeandear.zoom.us/j/583662273?pwd=TWJtUEV6ZTFUTzUzaWx5dXFmR2puQT09>

Meeting ID: 583 662 273

Passcode: 248969

## Summary of talk:

Illumina sequencing technology has been at the forefront of understanding disease states for the last fifteen years. Recent advancements in single cell RNA (scRNA) and DNA (scDNA) methods have further pushed the ability to understand genetic differences at the cellular level requiring the improvement in sequencing technologies to enable larger studies. In this talk, we will explore recent advances in scRNA and scDNA methods to further ocular research and how Illumina offers sequencers of varying throughput to enable researcher's sequencing goals.

## About Speakers:

**Biography (Ryan Hegarty):** I graduated from University of Connecticut in 2004 with a Bachelor of Science in Molecular and Cell Biology followed by a Master of Liberal Arts in Biotechnology – Project Management from Harvard University Extension School in 2013. I started in the Genomics Platform at the Broad Institute in 2005 where I started working on process development for Solexa/Illumina sequencing in 2008. I have now been at Illumina since 2015, first starting as a Field Application Scientist before moving to the Sequencing Specialist role in 2019. I currently help support the account managers covering Cambridge and Boston and help guide customers to find the right Illumina (and other) solutions for their research goals.

**Biography (Brett Oosdyke):** I graduated from University of California, San Diego with a Bachelor of Arts in Business Administration and have been working at Illumina since 2018. I began my career on the regional marketing team at Illumina and shifted over to inside sales beginning in 2019 to help enable our customers realize the full potential of genomics. I have been the Illumina Account Manager for all Boston-based health systems since the beginning of 2022, and I am tasked with the implementation of both clinical and research-based genomics at some of the leading academic medical centers in the world. I currently support all Illumina customers at MEEI, MGB, DFCI, BCH, BIDMC, MGH, and BWH with their library preparation, sequencing, bioinformatics, and genomics-strategy needs.

