

Monday, February 17 1:30 PM - 3:00 PM Room 33A Olympus America Inc

## Advancements in Lens Manufacturing Technology Develop New X Line Objective Lenses

Researchers use microscopes as essential tools for advancing their science, and objective lenses are crucial components of the system. Many applications benefit from high-quality images with a large field of view, but there is usually a trade-off where improvements in one area of imaging, such as flatness of field, lead to a decrease in another area such as chromatic correction. Conventional objective lens manufacturing technology forced a trade-off between numerical aperture, image flatness, and chromatic correction, making it difficult to improve all three in one objective. Olympus, with 100 years of innovative optical solutions for life sciences, has developed a new lens polishing technology that creates lenses with shapes that are difficult to fabricate using other methods. These improvements enable manufacturing of convex lenses with ultra-thin edges as well as ultra-thin concave lenses, which lead to more lenses being packaged in each objective housing, increasing the NA, image flatness, and chromatic correction range. In this presentation, you will learn how these improvements advance optical performance and a range of applications.

## Speaker

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