

# HSC Cell Imaging Core Newsletter Oct 2023

## Contents

1. Zeiss Axioscan 7 is ready to use
2. Instrument Demo by Discover Echo in HCI 1410 from Oct 31st to Nov 3<sup>rd</sup>  
<https://calendly.com/discoverecho>
3. Update for CosMx Spatial Molecular Imager from NanoString (HSC RM 59)
4. Olympus FV4000 demo at Neuroscience 2023 (<https://societyforneuroscience.simplybook.me/v2/>)

## 1. Zeiss Axioscan 7 is Ready to Use

We are thrilled to announce some exciting news regarding our new Zeiss Axioscan 7, located in HCI RM 1470. This state-of-the-art slide scanner is now ready for public use, offering you enhanced capabilities for your imaging needs.

Reflecting those enhanced capabilities, the hourly rate for using the Zeiss Axioscan 7 is \$44 per hour. The Axio Scan.Z1 continues to operate smoothly and will continue to provide its regular service. Its rate remains \$40 per hour.

For current users of the Z1 who wish to transition to the 7, we are offering two discounted services:

- **Profile Set Up:** Unfortunately, we can't simply copy a Z1 scan profile to the 7. There is too much difference between the machines. We will help set up a new profile on the 7 with no charge for staff time. Simply book the staff and Axioscan 7 time. We will exclude the staff time from billing.

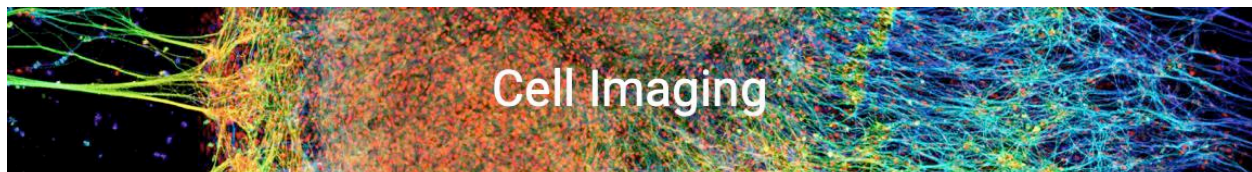
- **Refresher Training:** While the Zen software is similar, there are a number of differences and improvements. If you have been trained on the Z1, we expect training on the 7 to take an hour. We will do this "refresher" with no charge for staff time. Book the staff and Axioscan 7 time. Let us know that this is a refresher and we will exclude the staff time from billing.

New users should continue to schedule 2 hours for training on either the Z1 or 7 and will be charged for both instrument and staff time.

### Key Features of the Zeiss Axioscan 7:

**Improved Support for Opal Dyes:** The scanner is equipped with two light sources and two filter sets, making it ideal for handling multiplexed samples. One filter set is tailored for OPAL dyes, offering enhanced capabilities for sample labeling. If you require assistance with OPAL dye labeling, please consult the BMP core in HCI.

Unfortunately, switching the filter set to Opal and back requires staff time. While we will not charge for this service, please book an extra half hour of staff and instrument time at the start and end of your appointment for the switch. Depending on the popularity of the Opal dyes, we will adjust policy and scheduling accordingly.



**Advanced Functions:** The Zeiss Axioscan 7 includes advanced features such as polarized light (POL) imaging (e.g., for wound healing or fibrosis assays), the ability to adjust focus mapping for precise focus location setup, two multiband filters to expedite certain fluorescence scans, and a separated offline Zeiss analysis software (ZEN Desk) installed on the HCI workstation (HCI RM 1470).

The calendar for booking time on the Zeiss Axioscan 7 will be available online starting on October 23, 2023.

## 2. Instrument Demo by Discover Echo in HCI 1410 from Oct 31st to Nov 3rd

The Cell Imaging Core is pleased to announce that Discover Echo will demonstrate their Rebel, Revolve, and Revolution digital hybrid microscopes Tuesday, Oct. 31 – Friday, Nov. 3 in HCI Research North, Room 1410.

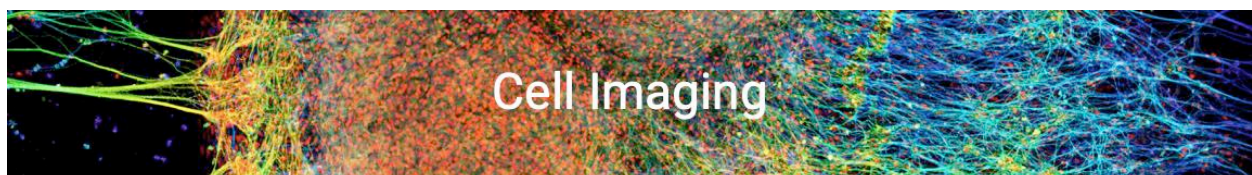
For more information, please see the website:

Discover Echo Website: <https://discover-echo.com>

If you would like to set up a 30-minute hands-on demonstration on one of these microscopes, use the signup link below.

Sign Up: <https://calendly.com/discoverecho>

Map: <https://cores.utah.edu/wp-content/uploads/2023/01/CellImaging-HCI-555.pdf>



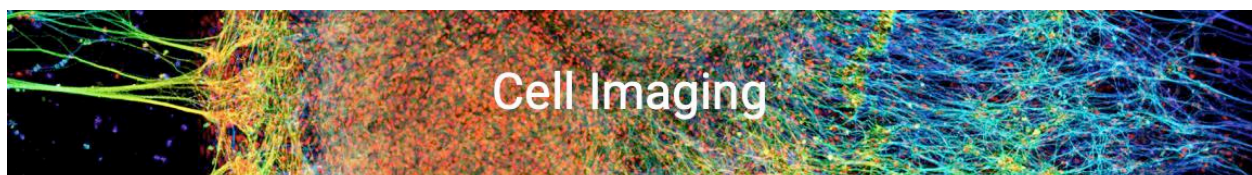
### 3. Update for CosMx Spatial Molecular Imager from NanoString (HSC RM 59)

The CosMx Spatial Molecular Imager from NanoString has been installed in the HSC RM 59. Currently, core members and major users are in the training session and testing the instrument. Once we are ready, the Imager will be open to the public.

Understanding different cell types, how cells behave with one another, and their purpose enhances our ability to interpret biology and disease. The CosMx Spatial Molecular Imager (SMI) allows researchers to comprehensively map single cells in their native environment and extract deeper biological insights from a single experiment.

To learn more about the CosMx, please visit:

<https://nanosttring.com/products/cosmx-spatial-molecular-imager/single-cell-imaging-overview>





#### 4. Olympus FV4000 demo at Neuroscience 2023 2023

Evident Scientific, Inc. (formerly Olympus) is about to launch a new confocal system, the FV4000 – the new detector has a huge linear range making it nearly impossible to saturate and the system has more detectors.

If any of our researchers are going to the Neuroscience 2023 meeting, November 11-15, at Washington DC, Evident will have the FV4000 there to demo as well as the Apex box microscope, the VS200 slide scanner, and the Crest V3 light sheet system.’

Below is the statement from Evident Scientific, Inc. for this demo and the registration link.

“A transformation is coming, and we are personally inviting you to come experience it for yourself. Join us in Washington, D.C at the Society for Neuroscience conference on November 14th in the Product Theater, 1:00PM, as we unveil our latest technology. You’ll never look at microscopy imaging the same way. Soon, you’ll be able to acquire higher precision images with exceptionally low noise, empowering your research with more reliable and quantifiable data from your samples.

Sign up now to be among the first to see the new system in action in our Booth 2123!

<https://societyforneuroscience.simplybook.me/v2/>

Thank you for visiting the Evident in-booth demo page for SfN 2023! Click the "Schedule a Demo" button above to schedule an in-booth demo with one of our product experts. All demos will be at Booth #2123 at the Walter E Washington Convention Center. Demos are available every day during the show hours”

The FV4000 demos are listed as “The Journey Begins.”

If any researcher is interested in FV4000 and willing to integrate it into the HSC Cell Imaging Core, please let us know. We are very happy to work with you to get this done.

