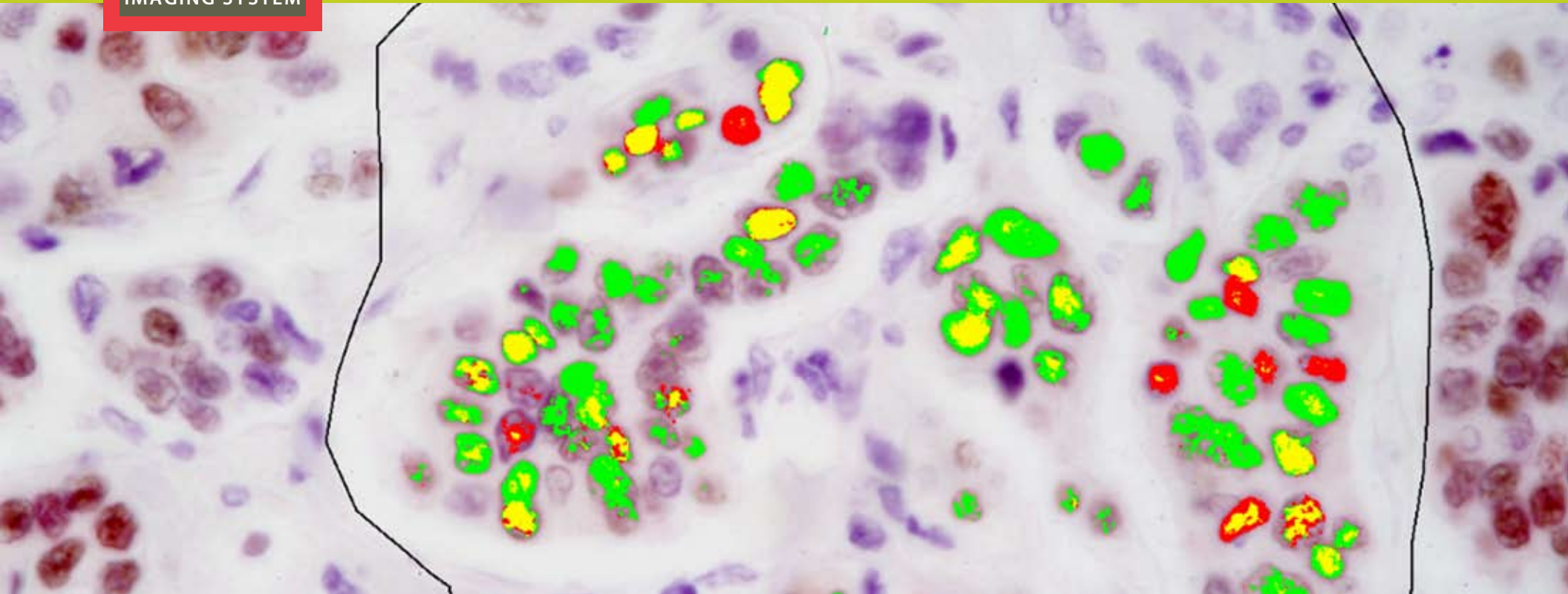


**NUANCE**

**BRIGHTFIELD**

**IMAGING SYSTEM**

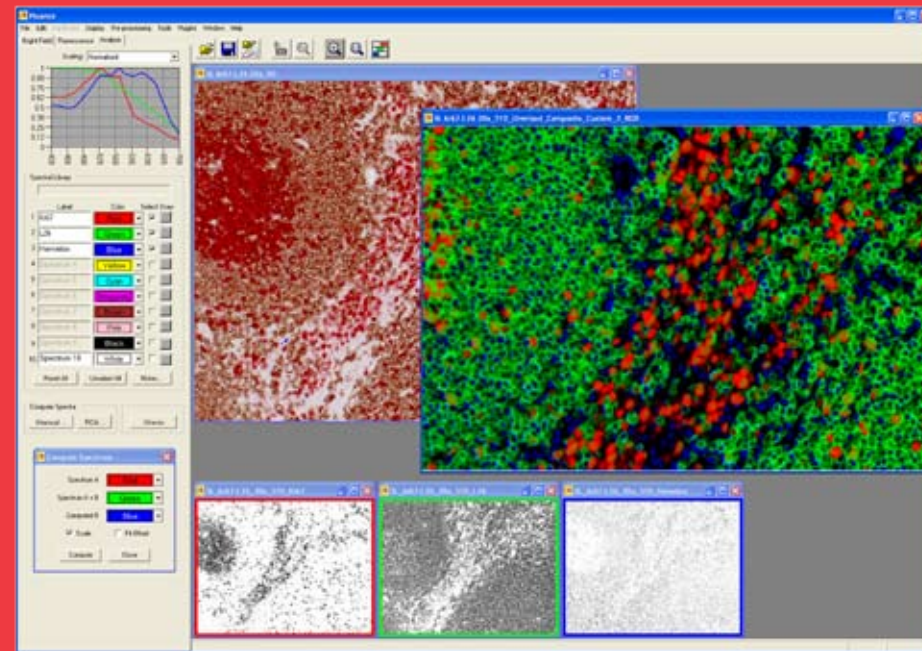


**Until now, multiplexing like this while maintaining morphology just couldn't be done.**

# Until Nuance.

The multispectral imaging system that enables **multiplexing within the morphological context.**

It may be difficult to grasp, but with Nuance you can now advance beyond multiplexing in homogenized tissues and isolated cells to multiplexing in tissue in which the morphological context is maintained. Nuance enables the multiplexing of molecular markers, even when co-localized in tissue sections. Which means you can multiplex *and* maintain the morphological relationship between the markers at the same time. With Nuance, you get access to information you can't get any other way.



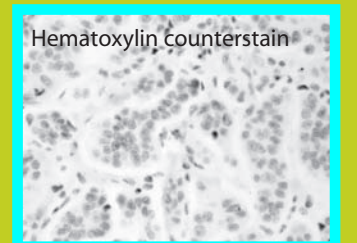
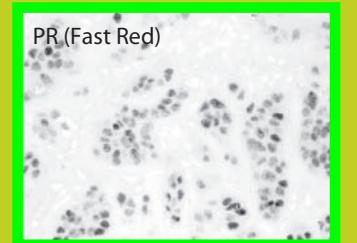
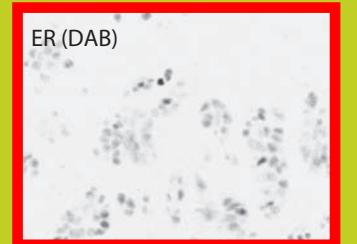
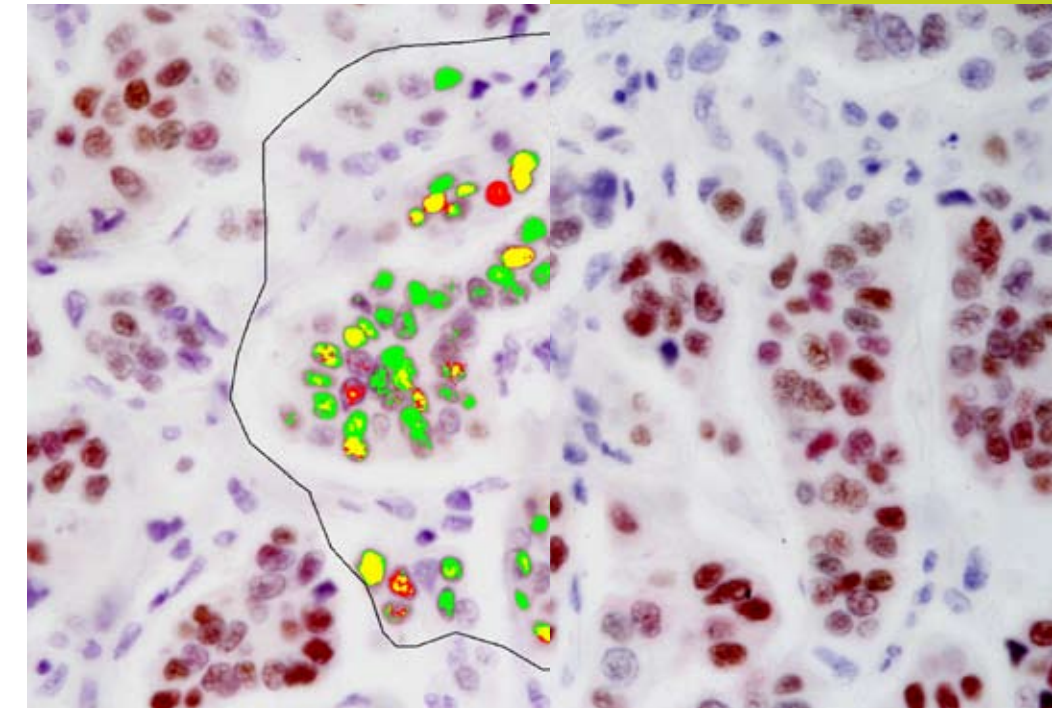
Yes, it's amazing. And yes, you can do it.

Nuance lets you go way beyond your current limits—all the way to visualizing multiple nuclear markers separate from cytoplasmic markers and membrane markers all in the same tissue section. With Nuance, you no longer have to separate multiple markers on different tissue sections, or by separating individual cell populations, or by homogenizing the sample and capturing the different markers in a spatial array very different from the native biological state. Nuance lets you multiplex while maintaining the native state.

**Nuance enables the resolution of multiplexed markers.**

Nuance enables you to capture colorimetric images at different wavelengths and generate a spectral curve for each of the colorimetric dyes used on the slide. It then allows you to map the locations for each of the dyes on the slide, as they exist within the original image, thus maintaining the proper morphology of the biological sample.

before

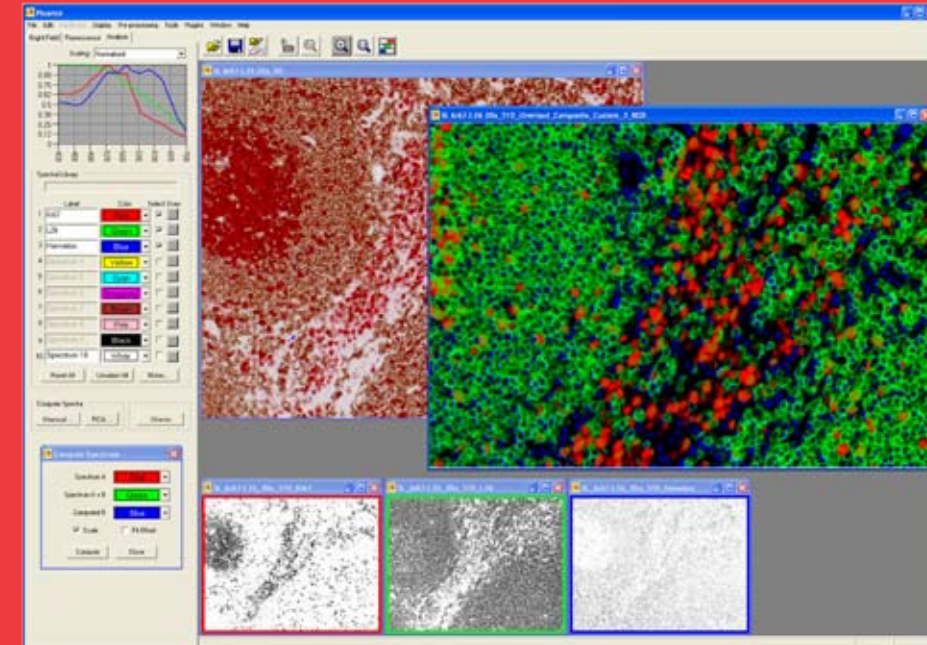


From the RGB "before" image, each spectral element is isolated in the panels to the right and then reassembled to create the composite "after" image.

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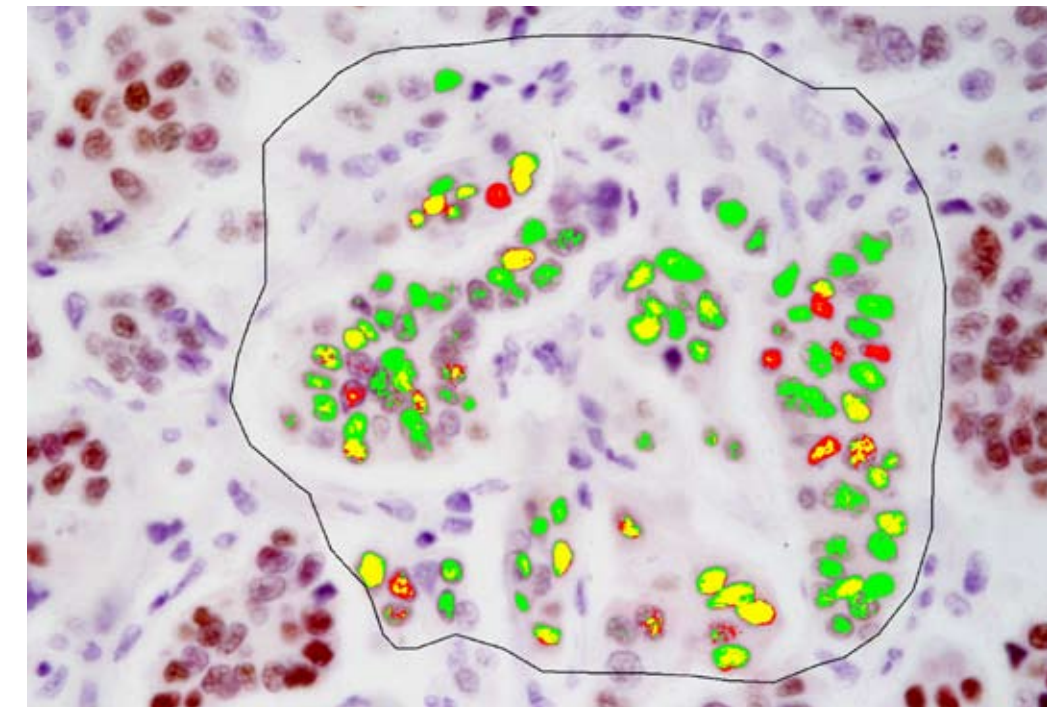


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after

**Breast cancer section labeled for ER (DAB) and PR (Fast Red) with a hematoxylin counterstain. Image shows RGB image of sample overlaid with red (ER), green (PR) and yellow (co-localized ER and PR).**

Contact us at 1-800-383-7924 or at [www.cri-inc.com/nuance](http://www.cri-inc.com/nuance) to learn more about Nuance or to schedule a demonstration of this breakthrough system.

Nuance makes a whole new level of research possible.

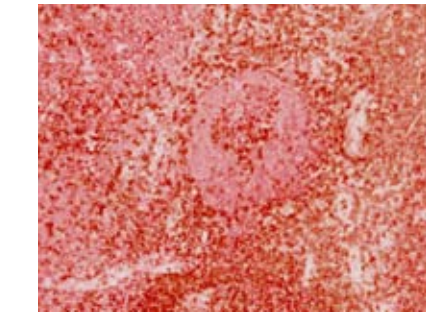
Many researchers want to be able to multiplex in tissue samples without the loss of morphology. Nuance makes these results possible. And Nuance works for both fluorescence and brightfield immunohistochemistry samples, making it an even more valuable addition to your lab. With its ease-of-use and lower price-point, you'll quickly get a return on your Nuance investment.



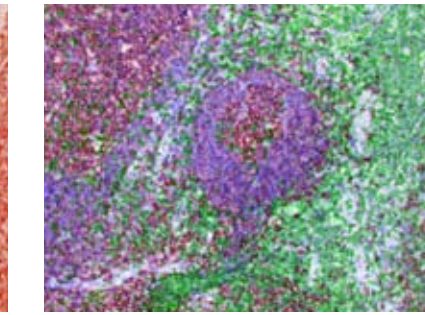
Utilize our breakthrough to enable yours.

Breakthrough results in your lab require microscopy systems designed to facilitate your experiments, improve your image quality, and significantly advance your research. Your lab requires Nuance.

before



after



On the left, tonsil section labeled for CD3 (red, AEC), CD20 (red, LPR) and a nuclear counterstain (Nuclear red). On the right, the unmixed Nuance image of the same tissue displayed in pseudocolor to reveal the different cell types.

## Nuance Brightfield

	Nuance VIS-FL	Nuance VIS-Flex	Nuance GNIR	Nuance GNIR-Flex
Spectral range	420-720 nm	420-720 nm	500-950 nm	500-950 nm
CCD	Sony ICX285	Sony ICX285	Sony ICX285	Sony ICX285
Bandwidth*	30 nm	15 nm or 30 nm	60 nm	30 nm or 60 nm
Mount required	1x C-mount	1x C-mount	1x C-mount	1x C-mount

\* at 550 nm for VIS models, at 700 nm for GNIR models

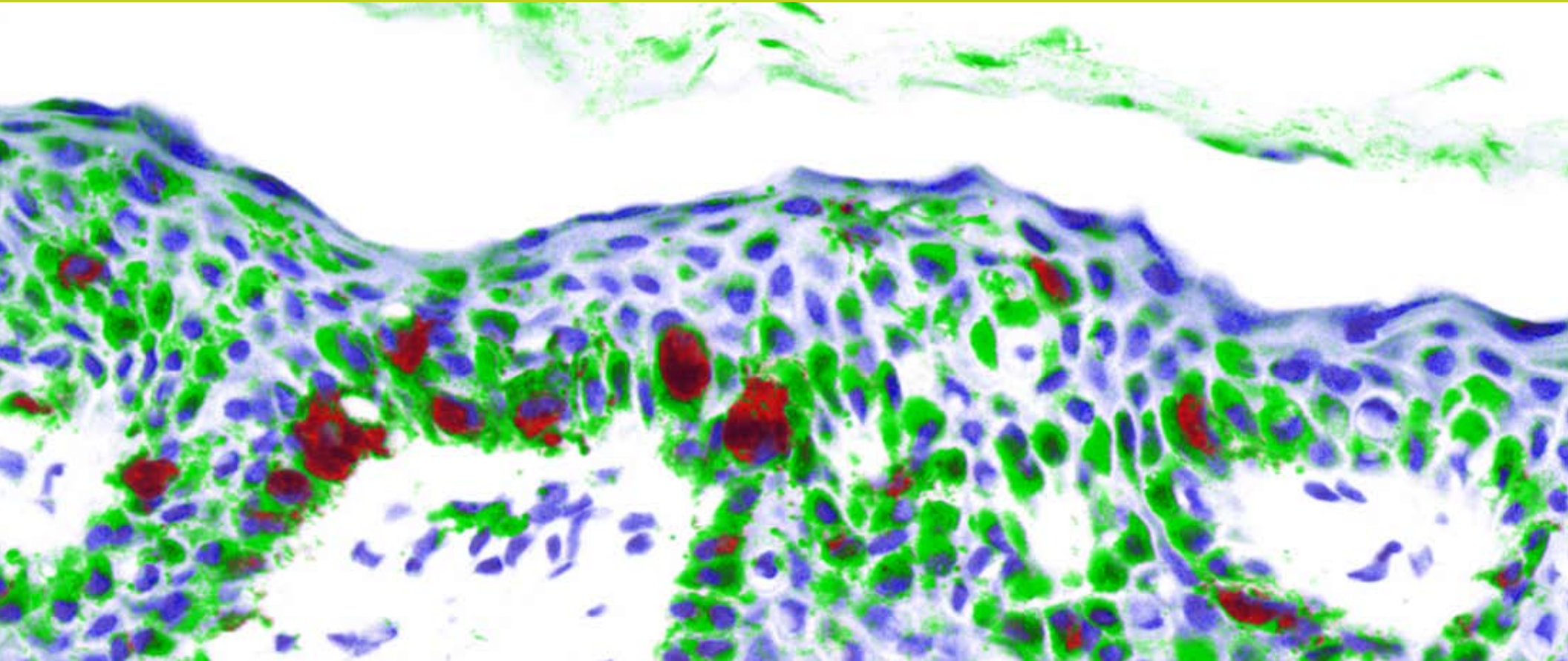
“With the advent of multispectral imaging technology like Nuance... within one decade, every tumor and cell biology laboratory will have a spectral imaging device on one of their microscopes. And then no one will ask the question I currently hear so often: ‘Spectral what?’”

Chris van der Loos, Academisch Medisch Centrum, Universiteit van Amsterdam

## About CRI

Cambridge Research & Instrumentation, Inc (CRI) is a Boston-based biomedical imaging company providing innovative optical imaging solutions to our customers for more than 20 years. Our multidisciplinary team is dedicated to working with our academic and commercial customers to provide high-value solutions. We provide comprehensive imaging and analysis solutions that

enable the user to investigate and characterize biological phenotypes while preserving spatial context. With over 80 patents pending and issued, CRI's solution platforms encompass sub-cellular, cellular, and whole animal applications. Our innovations are being utilized around the world to enable new breakthroughs in research, health and medicine.



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