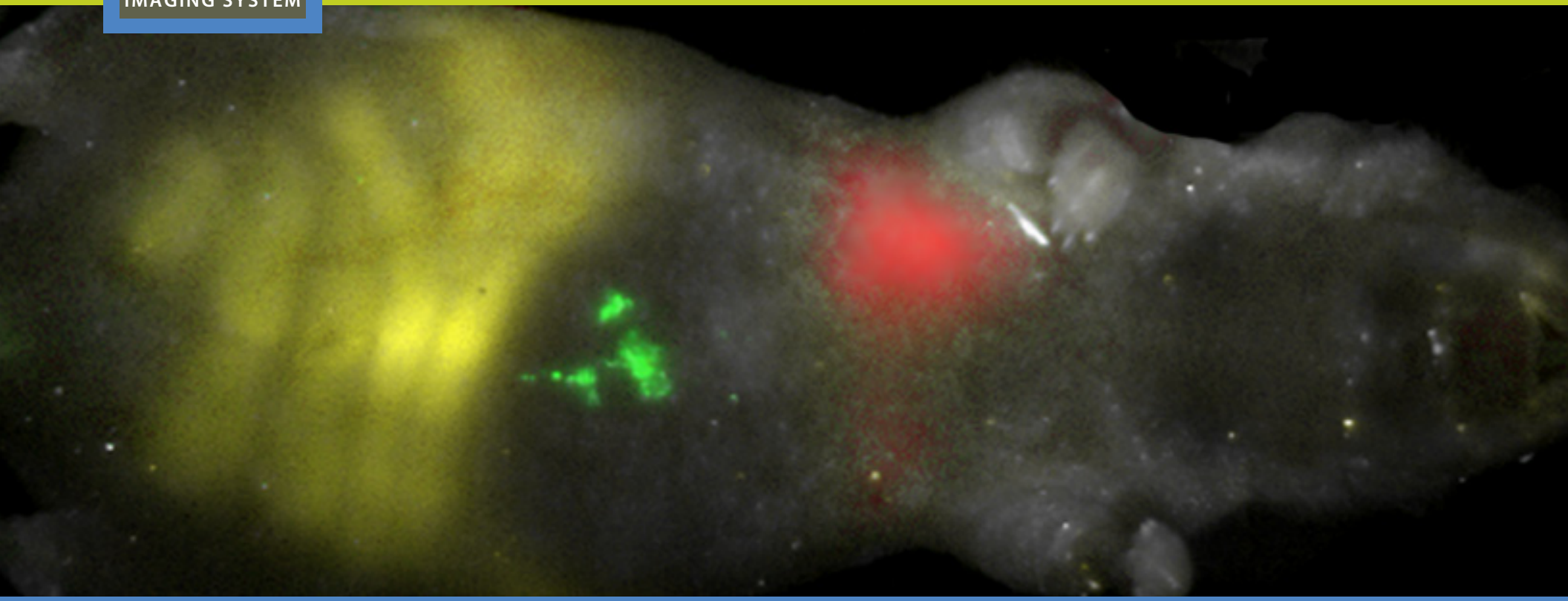
MAESTRO

IN-VIVO

IMAGING SYSTEM



Think inside the box.

Think Maestro. The *in-vivo* imaging system that eliminates autofluorescence and enables multiplexing.

Until Maestro, biologists who used fluorescent reagents to visualize tumor growth and distribution in their *in-vivo* research were plagued by autofluorescence problems in their samples. When working with whole mice, for example, the autofluorescence signal from hair and skin can be strong enough to obscure the signals you need to visualize. Maestro resolves this issue by separating the experimental signal from the background noise so you can see what you're looking for in the experiment. It's the best fluorescence-based detection system available today.

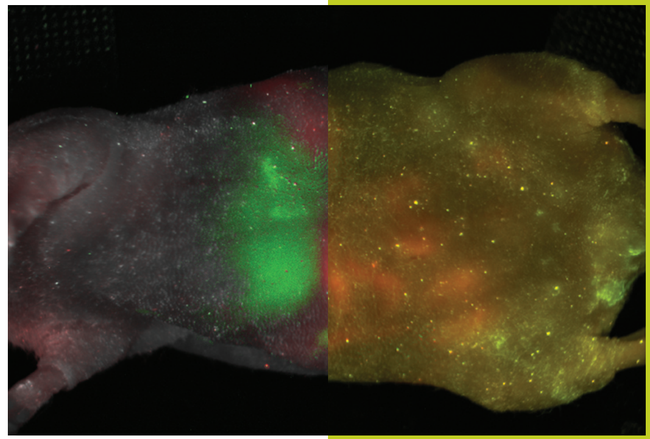
Now you can see smaller, deeper tumors—sooner.

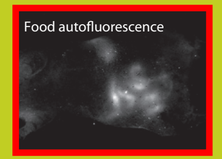
Maestro enables researchers to see smaller and deeper tumors sooner due to its extreme low-light-level sensitivity. And it enables you to detect multiple labels within the same sample, by allowing for the separation of different signals, even if they overlap spectrally or spatially. Maestro's powerful tunable filter system then readily captures images across a broad spectrum. You'll see better results in seconds!

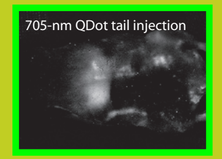
Multiplex and quantify—it's easy with Maestro.

Maestro enables you to image multiple fluorophores *in-vivo* simultaneously because of its unique multispectral imaging approach. And whether you want to determine tumor size, or how much marker was found in a given location, or which organs have what combination of markers, Maestro manages quantitation quickly and easily.

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.

Photography Credits • Front cover — Mouse samples with lung infection courtesy of Clemens Lowik, Ivo Que, Eric Kaijzel, Andy Waters, Blandine Franke-Fayard and Chris Janse, Leiden University Medical Center • Before /after shot for under inside right panel, above spec chart — Mouse samples courtesy of Shuming Nie, Emory University • Back cover — Bone image courtesy of Gary Sahagian, Small Animal Imaging/Tumor Biology Facility, Tufts University School of Medicine

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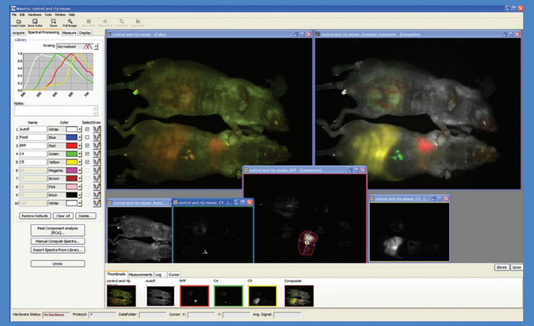

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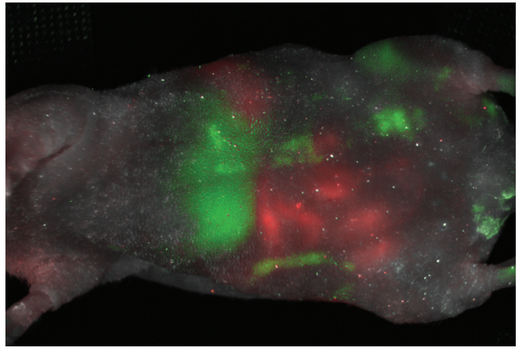
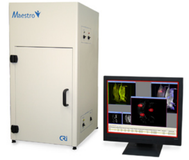
after



By eliminating autofluorescence and unmixing the 705-nm Qdot fluorophore in this test mouse, Maestro provides a high contrast image showing a composite of two unmixed components.

Maestro outperforms other *in-vivo* imaging systems.

Even if your research lab utilizes a multi-modal imaging system, your fluorescence ability is compromised. Only Maestro delivers fluorescence-based detection that is sensitive enough to pick up weak signals. Its enhanced sensitivity makes it unique among any and all competitive products.

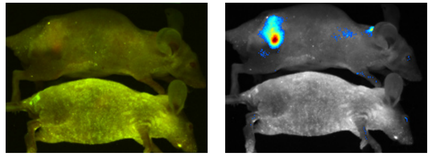


Utilize our breakthrough to enable yours.

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

Contact us at 1-800-383-7924 or at www.cri-inc.com/maestro to learn more about Maestro or to schedule a demonstration of this breakthrough system.

before | after



On the left, a standard color fluorescence image of the tumor bearing test mouse labeled with a 630-nm Qdot-labeled antibody (left) and uninjected control (right). On the right, an unmixed Maestro image of that tumor with the autofluorescence removed.

Maestro *In-Vivo*

	Maestro VIS	Maestro GNIR	Maestro Flex
Wavelength range	500 to 720 nm	500 to 950 nm	500 to 950 nm
Sensitivity compared to monochrome*	300x	300x	300x
CCD	Sony ICX285	Sony ICX285	Sony ICX285
Temperature	10 C	10 C	-5 C
Maximum exposure time	10 sec	10 sec	15 minutes
Bandwidth	40 nm	40 nm	Flexible (20 or 40 nm)
Typical fluorescence acquisition time	2–5 seconds	2–5 seconds	2–10 seconds

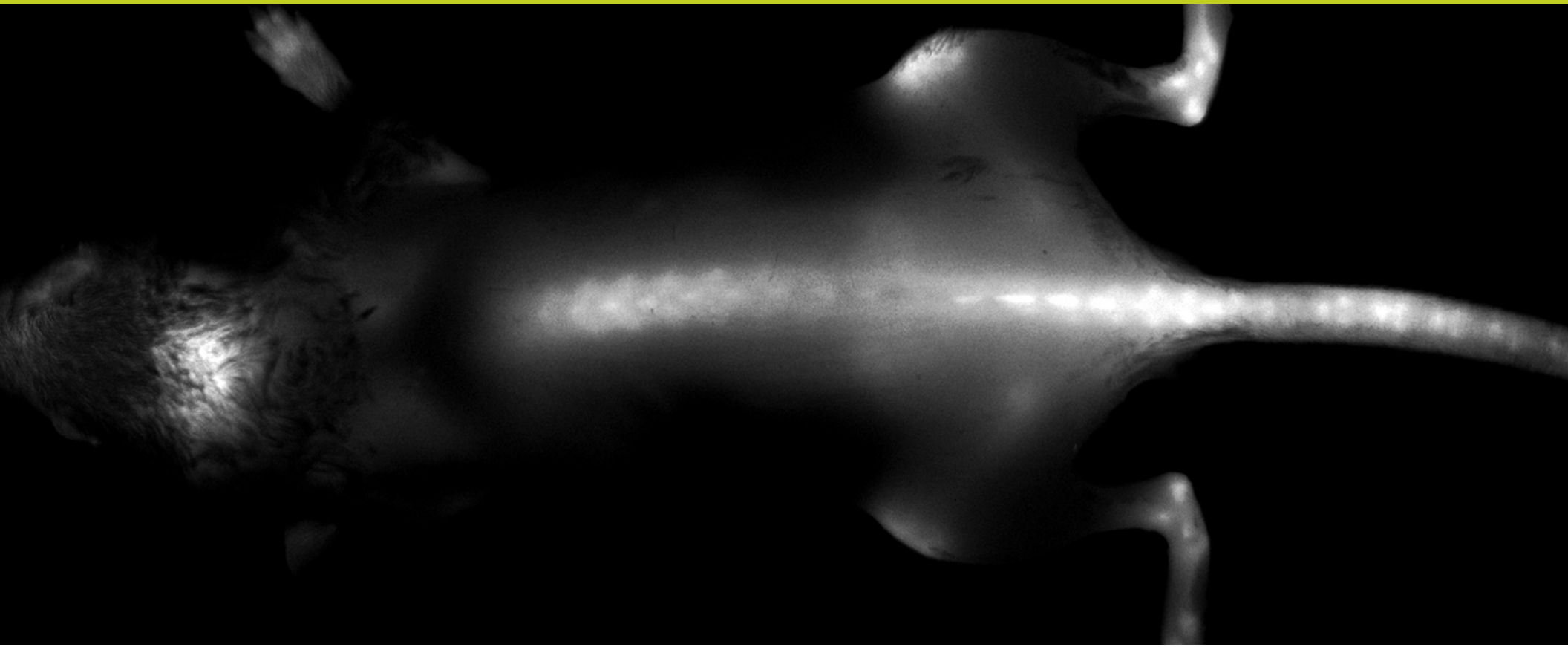
* Maximum sensitivity increase over standard monochrome imaging methods

"It's my favorite machine on the planet.
It made my dissertation possible!"

Sarah Gidner, University of Texas South Western

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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