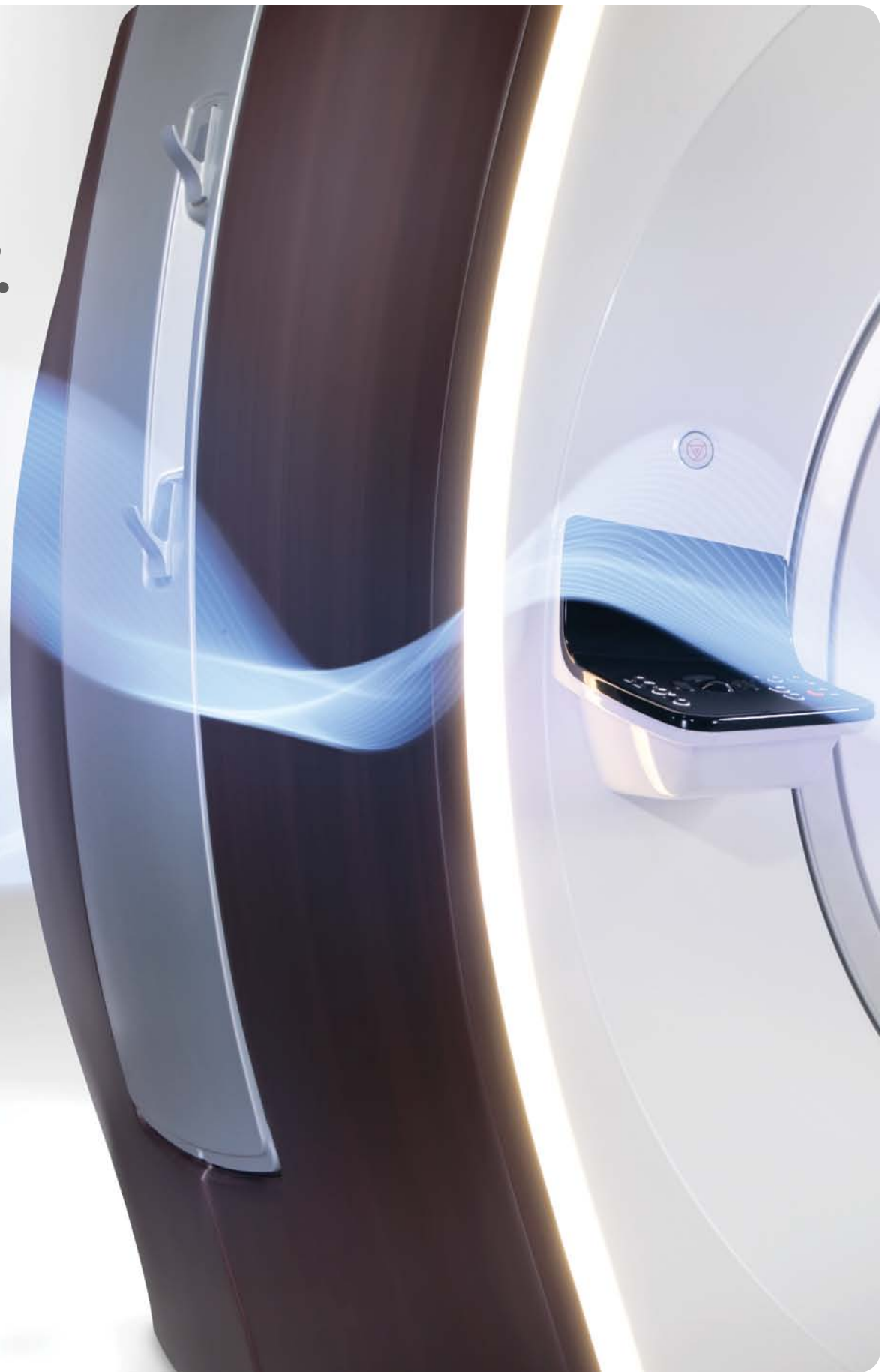


GE Healthcare

# CARING DESIGN. INSIGHTFUL TECHNOLOGY.

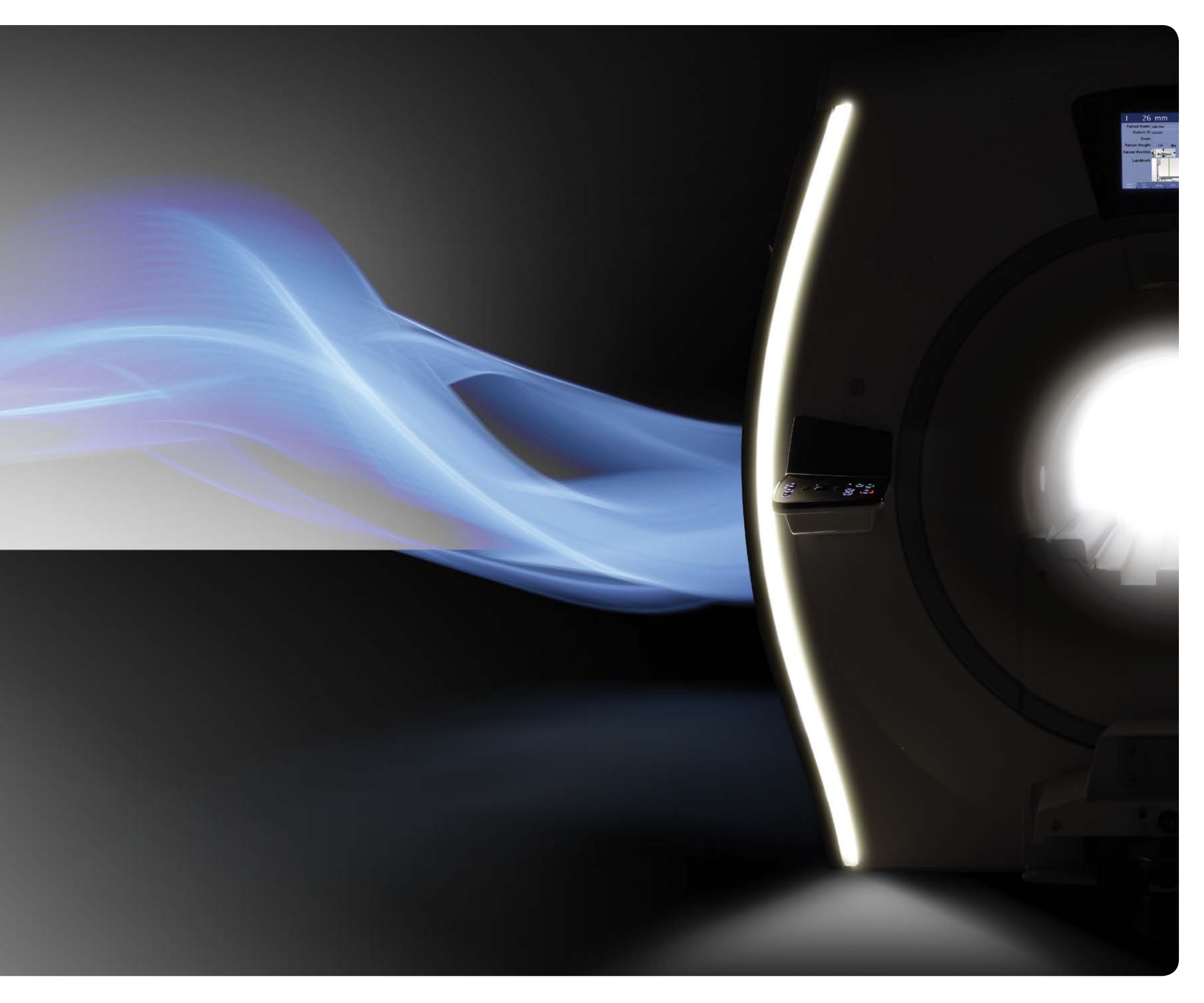
Discovery\* MR750w 3.0T



**“IT WAS LIKE IT  
CAME TO LIFE.  
THE WARM LIGHT  
MADE ME FEEL  
WELCOME.”**

Every piece of equipment you own represents a balance of technology and design. The Discovery MR750w not only exemplifies this philosophy, it takes it further. We've integrated the power of 3.0T technology you desire with a wider bore patients deserve. And that's just the beginning.

See how the Discovery MR750w gives you the experience you deserve, performance you desire and the versatility you demand.



26 mm  
Patient Name: J...  
Patient ID: 12345  
Exam: CT  
Patient Weight: 150 lbs  
Patient Position: Supine  
Landmark: ...

# CARING DESIGN.

## MR IN A NEW LIGHT.

Sometimes something as simple as a light, such as the sophisticated LED lighting on the Discovery MR750w, can be enough to get people's attention. This small, but important design choice represents our focus on the human element in MR.

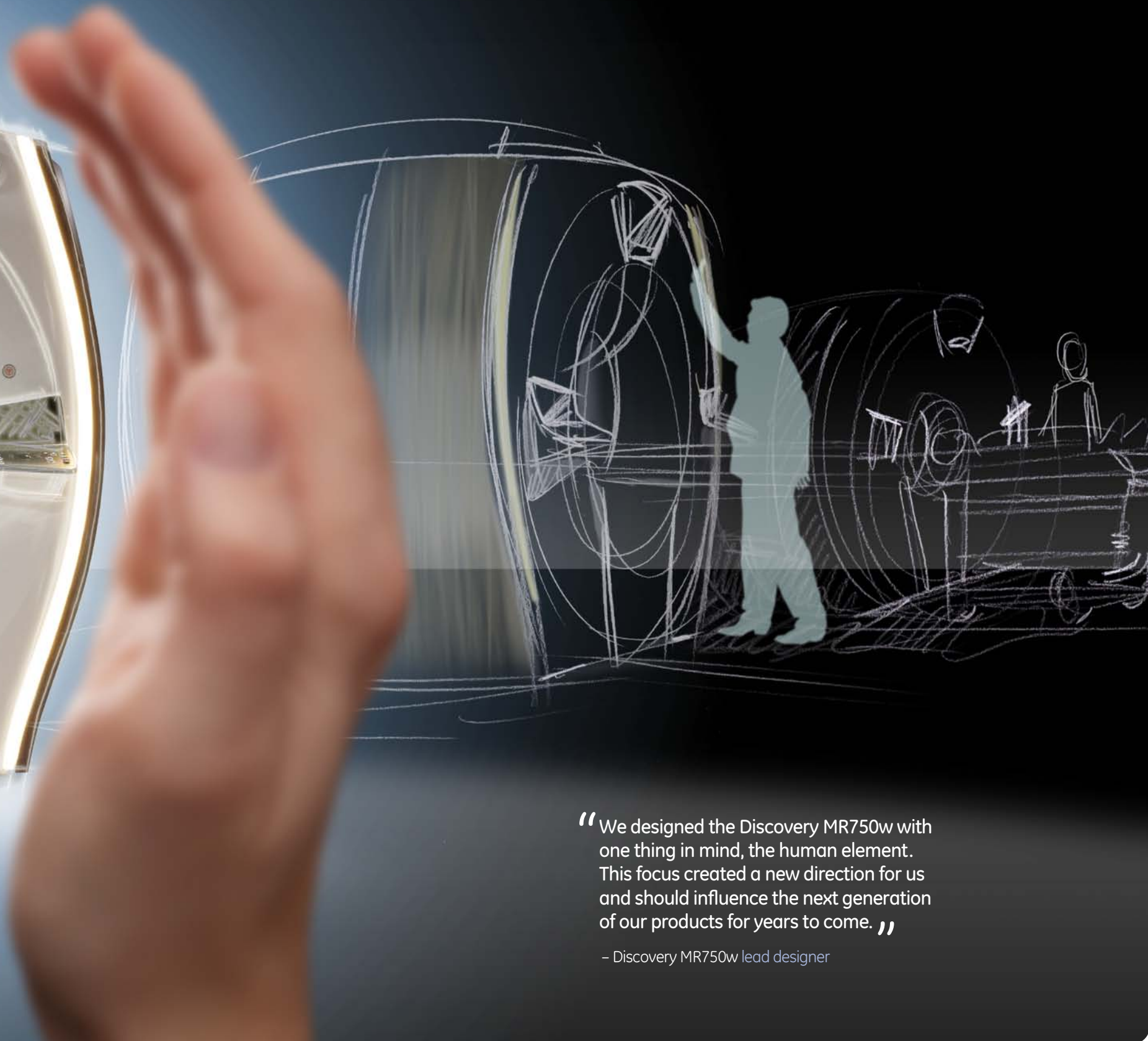
Using the symbol of caring hands as our inspiration, the Discovery MR750w was designed to be welcoming to the patient and intuitive for the technologist.

We listened to patients who asked us for a comfortable scan experience. We not only widened the bore and created soft, flexible coils, but we completely re-designed the table surface with different cushion densities to help alleviate pressure points for a more relaxing exam.

We also listened to technologists describe their use of the on-system controls. So we built a sleek, ergonomically-friendly interface to mimic the same consumer-designed devices they use in their home every day. This allows them to focus their attention where it belongs, on their patients.

The result? An MR system inviting to patients and user friendly for technologists.





“ We designed the Discovery MR750w with one thing in mind, the human element. This focus created a new direction for us and should influence the next generation of our products for years to come. ”

– Discovery MR750w lead designer



# INSIGHTFUL TECHNOLOGY.

## THOUGHTFULLY BUILT.

Imaging technology is only as useful as the insight it offers you. With the Discovery MR750w, we've successfully combined what you desire with what your patients deserve. Namely the insight you only get from the power of 3.0T with the open architecture of a 70 cm wide bore. This brings everything into balance.

### MultiDrive RF Transmit ①

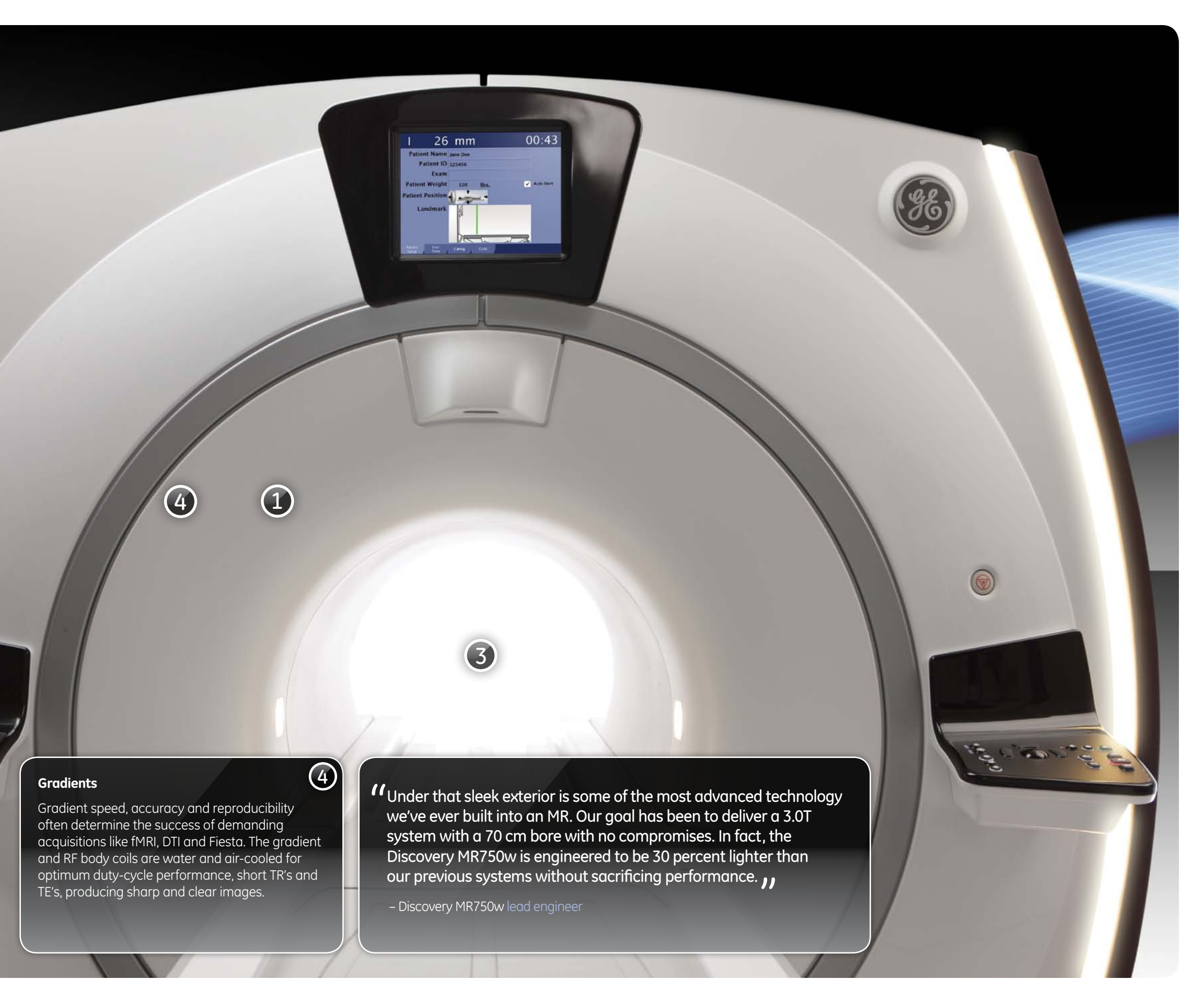
With 3.0T, precise control over the RF environment in a 70 cm bore can be challenging. Until now. Through fully automated and independent RF pulse amplitude and phase control, MultiDrive RF Transmit produces consistently clear 3.0T images.

### Optical RF (OpTix) ②

OpTix Optical RF offers high channel count, analog to digital-optical signal conversion where it matters – inside the scan room to minimize noise and signal degradation, but away from the patient to enhance comfort and safety.

### Usable FOV ③

Our 70 cm flared, open bore design with a large 50 x 50 x 50 cm field of view results from excellent homogeneity, gradient linearity and RF uniformity. In order to properly image off-center anatomy such as a shoulder or hip, you need a large, usable field of view, which the Discovery MR750w delivers.



26 mm 00:43  
Patient Name: Jane Doe  
Patient ID: 123456  
Exam  
Patient Weight: 120 lbs.  Auto Start  
Patient Position  
Landmark

4

1

3

4

#### Gradients

Gradient speed, accuracy and reproducibility often determine the success of demanding acquisitions like fMRI, DTI and Fiesta. The gradient and RF body coils are water and air-cooled for optimum duty-cycle performance, short TR's and TE's, producing sharp and clear images.

“Under that sleek exterior is some of the most advanced technology we've ever built into an MR. Our goal has been to deliver a 3.0T system with a 70 cm bore with no compromises. In fact, the Discovery MR750w is engineered to be 30 percent lighter than our previous systems without sacrificing performance. ”

- Discovery MR750w lead engineer

# FLEXIBLE COILS.

## EMBRACE THE PATIENT.

Coils are to MR what lenses are to a camera. They help focus the energy of MR into a clearer picture of your patients. However, no two patients are alike and traditional coil design can sometimes emphasize function over comfort. And an uncomfortable, moving patient can sometimes lead to poor image quality and time-consuming re-scans.

Not any more. The Geometry Embracing Method (GEM) Suite is designed to bring a new level of comfort to patients, minimizing anxiety and motion during the exam. Crafted to embrace the patient, these flexible coils make for a relaxed scan experience. This also makes it easier for technologists to correctly position their patients without strain or difficulty.

Imagine what your patients will say when you can now offer feet-first imaging for all exam types, lightweight, flexible coils and a re-designed table surface that alleviates pressure points. They'll probably thank you.

“We've completely changed how we think about coil design. With GEM Suite, patients can expect a more comfortable exam with open, flexible coils that naturally follow the contours of the human body.”

– GEM Suite [lead coil engineer](#)

### **GEM express patient table and posterior array**

The GEM express patient table is a mobile patient transport with an embedded high-density, posterior RF coil array. The integrated posterior array supports both head-first and feet-first imaging for all anatomies and can help eliminate the need to reposition patients within an exam, as well as the need for coil exchanges.



### **GEM anterior array**

The GEM anterior array facilitates extended coverage of chest, abdomen, pelvis and cardiac imaging. It is lightweight, flexible, thin and pre-formed to conform to the patient's size and shape.

2

### **GEM lower extremity array**

The GEM lower extremity array facilitates imaging of the thighs and lower legs. The coil incorporates an innovative, self-supporting hinge design between the upper and lower elements to accommodate various patient sizes and simplify patient setup.





### **GEM head and neck unit**

The GEM head and neck unit (HNU) can support head-first or feet-first imaging. The open-face design provides an unobstructed view for patients. GEM comfort tilt helps improve patient comfort by elevating the superior end of the coil. This enhances image quality by positioning the anatomy, for example in kyphotic patients, closer to the coil elements.



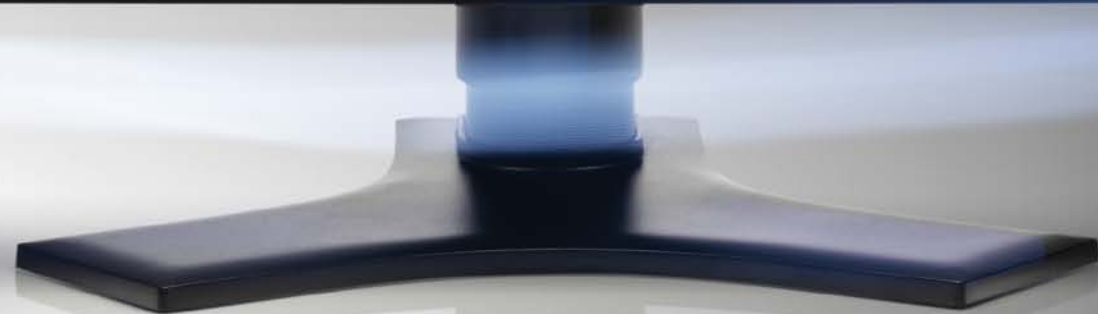


# INTUITIVE APPLICATIONS.

## SEE TO UNDERSTAND.

Even with the right balance of design and technology, intuitive applications are what truly drive better understanding of what you need to see. The Discovery MR750w offers the latest advanced applications to help you utilize the full potential of 3.0T MR imaging.

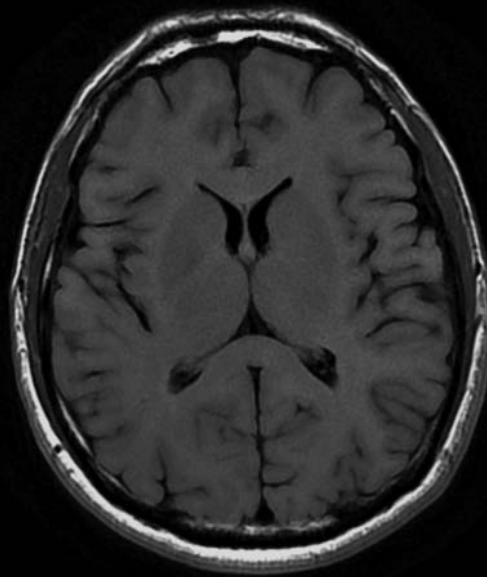
How about acquiring contrast-quality images without using contrast? With Inhance DeltaFlow, one of the many applications available on the Discovery MR750w, you can. Patients can now be evaluated without contrast injections. That's a win-win for you and the patient.



NEURO



Brain  
T2 PROPELLER Sagittal  
416 x 416 3 mm



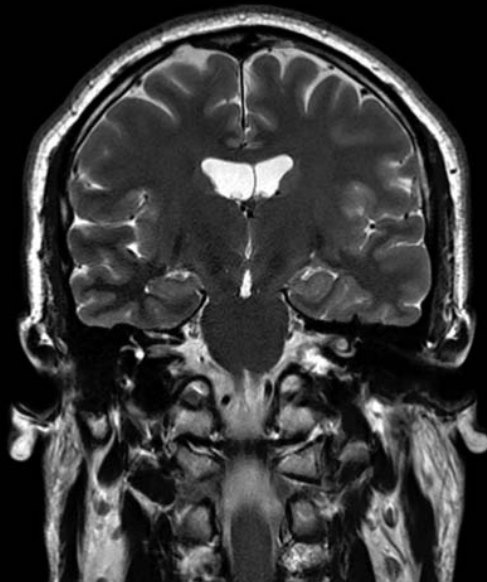
Brain  
T1 FLAIR PROPELLER Axial  
320 x 320 5 mm



T-Spine  
T2 PROPELLER Sagittal  
416 x 416 3 mm



Whole Spine  
T2 PROPELLER  
416 x 416  
3 station pasted



T2 PROPELLER Coronal  
512 x 512 3 mm

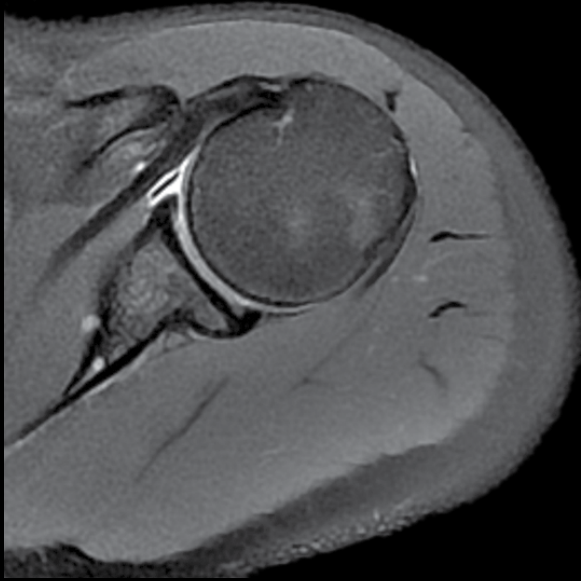


C-Spine  
T2 PROPELLER Sagittal  
512 x 512 3 mm

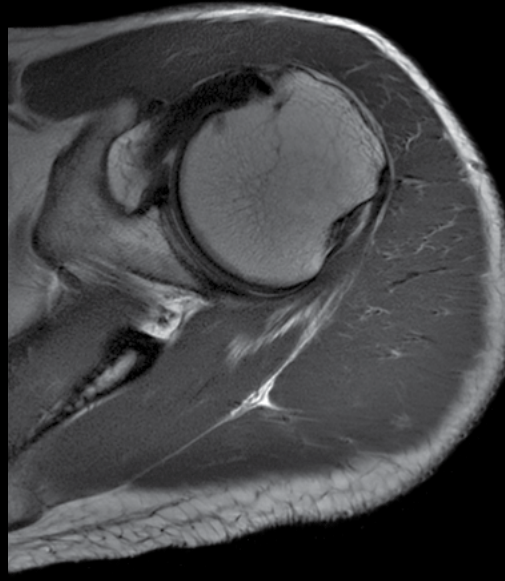


L-Spine  
T1 FLAIR Sagittal  
416 x 256 3 mm

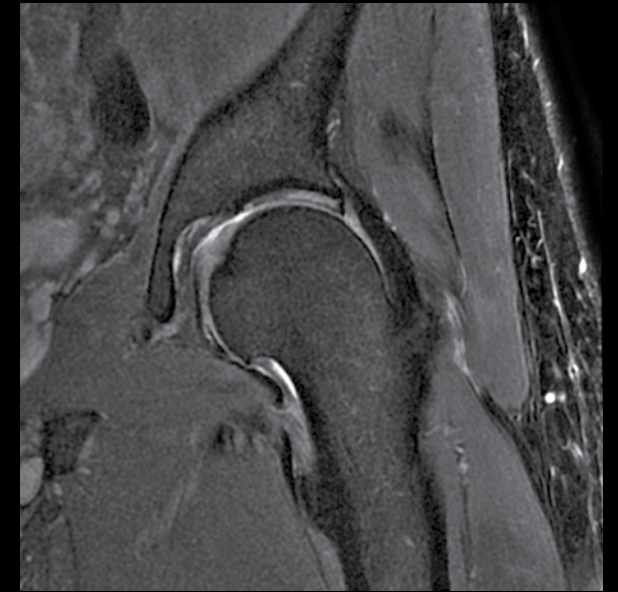
MUSCULOSKELETAL



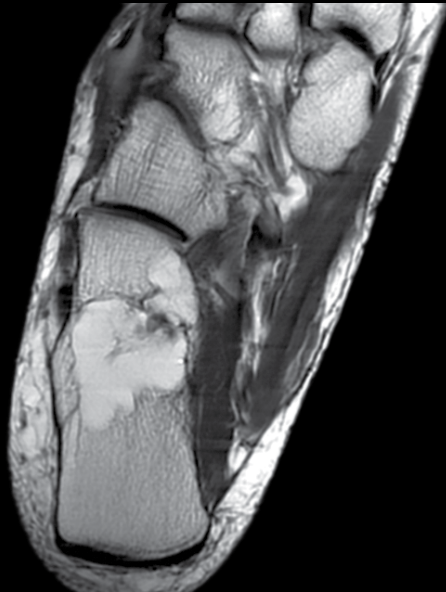
Shoulder  
PD PROPELLER Fat Sat Axial  
416 x 416 3 mm



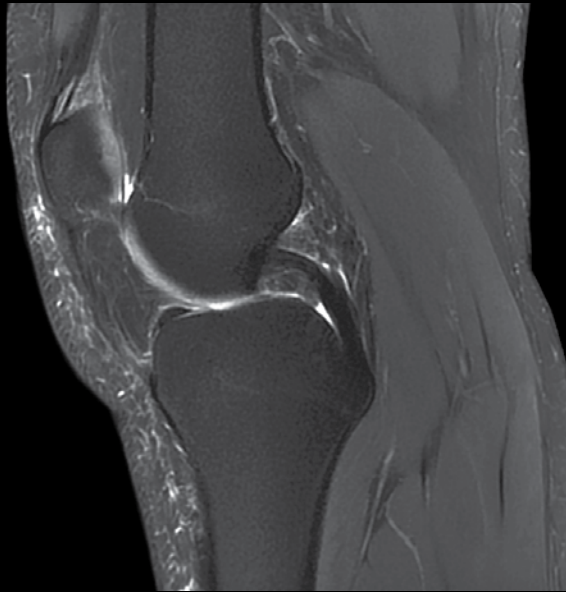
Shoulder  
PD PROPELLER Axial  
512 x 512 3 mm



Hip  
PD FSE Fat Sat Coronal  
256 x 256 4 mm



Ankle  
PD PROPELLER Axial  
384 x 384 3 mm



Knee  
PD PROPELLER Fat Sat Sagittal  
320 x 320 3 mm

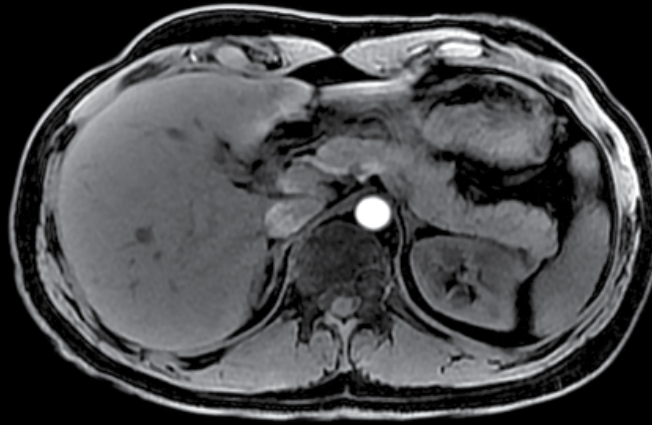


Knee  
PD frFSE Axial  
1024 x 1024 3 mm

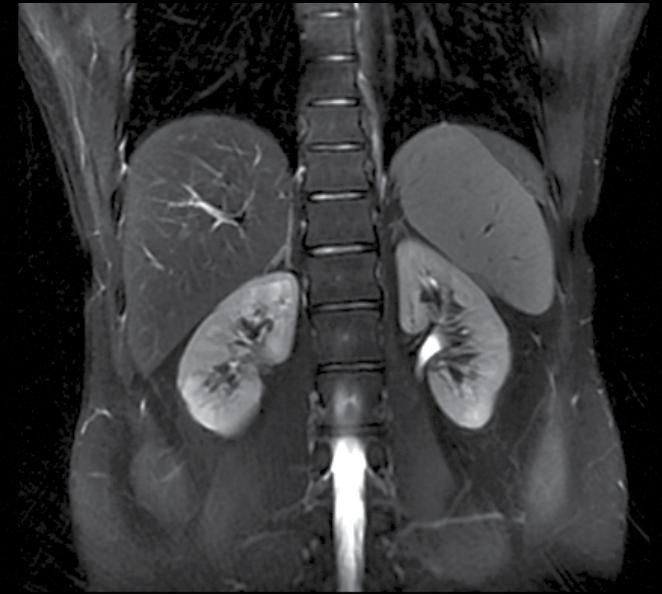
BODY



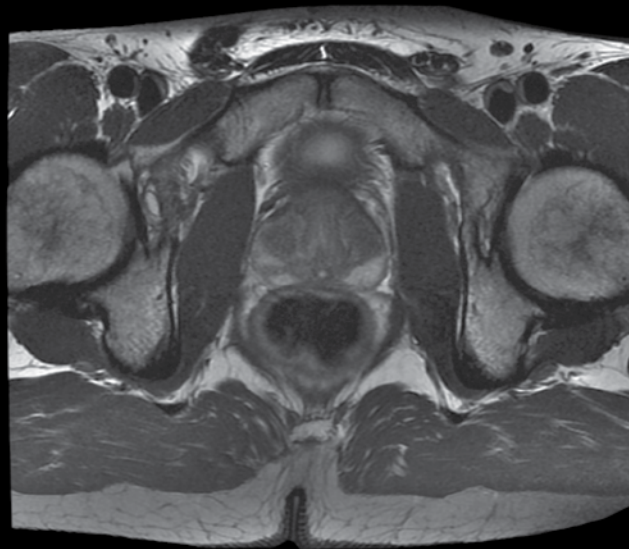
Whole Body  
T2 SSFSE Coronal  
384 x 256 FOV 44 cm  
5 station pasted



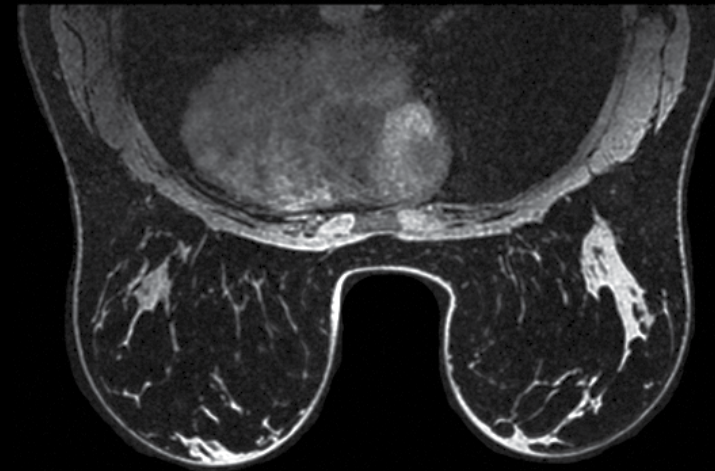
Abdomen  
LAVA Flex Axial  
Water Image  
320 x 224 3 mm



Abdomen  
T2 PROPELLER Coronal  
Fat Sat  
320 x 320 FOV 44 cm



Male Pelvis  
T2 FSE Axial  
384 x 256 3.5 mm



Breast  
VIBRANT Flex  
340 x 340 1 mm  
FOV 35 cm

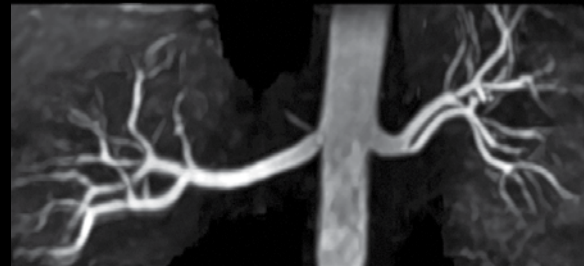
## VASCULAR



Inhance Deltaflow  
3 stations w/ ARC



Inhance 3D Velocity  
384 x 256 1.2 mm



Inhance Inflow IR Coronal  
320 x 256 2 mm

## INTUITIVE APPLICATIONS.

### CONTRAST WITHOUT CONTRAST

#### **Inhance DeltaFlow**

High-resolution, rapid, non-contrast lower extremity/peripheral vascular three-station imaging typically in less than six minutes.

#### **Inhance 3D Velocity**

High-resolution, fast, non-contrast imaging of the arterial and venous structure in the brain.

#### **Inhance Inflow IR**

Consistent and reliable non-contrast, free-breathing imaging of the arterial and venous vascular, such as the renal and portal vein.

#### **3D ASL**

Non-contrast brain perfusion. Quantitative perfusion imaging without contrast.

### LIVER TISSUE CHARACTERIZATION

#### **IDEAL-IQ**

Non-invasive characterization of fat content.

#### **MR-Touch**

Non-invasive measure of liver stiffness.

#### **eDWI**

Ability to visualize pathology and measure ADC values in a single breath hold in the liver and beyond.

### NEURO

#### **Cube**

3D FSE-based sequence for isotropic resolution in all contrasts (T1, T2, & T2 FLAIR).

#### **SWAN**

High-resolution visualization and delineation of small vessels and microbleeds.

#### **PROPELLER**

Motion-insensitive T1 FLAIR, T2, T2 FLAIR and DWI for efficient imaging of uncooperative patients.

#### **3D MERGE**

Improves grey-white matter contrast in the spinal cord.

### MUSCULOSKELETAL

#### **PROPELLER**

Motion-insensitive T1, T2 and PD imaging to improve the visualization of subtle structures such as cartilage, meniscus, ligaments and labrum.

### BODY

#### **LAVA Flex**

A rapid 3D sequence for consistent and reliable fat saturation in one breath hold.

#### **MRCP (MR cholangiography)**

High-resolution reliable visualization of the biliary ducts.

#### **PROPELLER**

Motion-insensitive, free-breathing T2 abdominal imaging.

#### **Whole Body w/ GEM Suite**

Perform whole body imaging without repositioning the patient or coils.



# GO FURTHER.

## BEYOND RADIOLOGY.

Being ready for the future means having a system that can not only grow beyond its original design, but surpass it. The Discovery MR750w was designed with the ability to go further than the traditional boundaries of radiology. If you're looking for a system capable of imaging during surgical procedures, ready for MR-guided focused ultrasound or adept in radiation therapy planning, look no further. Our exclusive, detachable table options are just one example of the many features developed to keep you at the forefront of healthcare.

Along with one of our many, customizable service plans, GE Healthcare has a 25-year history of providing you with select, no-charge enhancements to keep your systems and application capabilities up to date, ensuring you get the most out of your investment. Safeguard the future performance of your Discovery MR750w with our latest digital services to help fix issues fast and even stop problems before they happen.

### **InSite\***

InSite remote digital services enable us to reach out over broadband connections to understand and care for your critical equipment.

### **InSite OnWatch**

InSite OnWatch proactive technology can help avoid unplanned downtime by identifying service issues before they occur – even before you know anything is wrong.

### **iLinq\***

iLinq allows you to request applications support and also receive a quick response from our technical experts, all at the touch of an on-screen button.





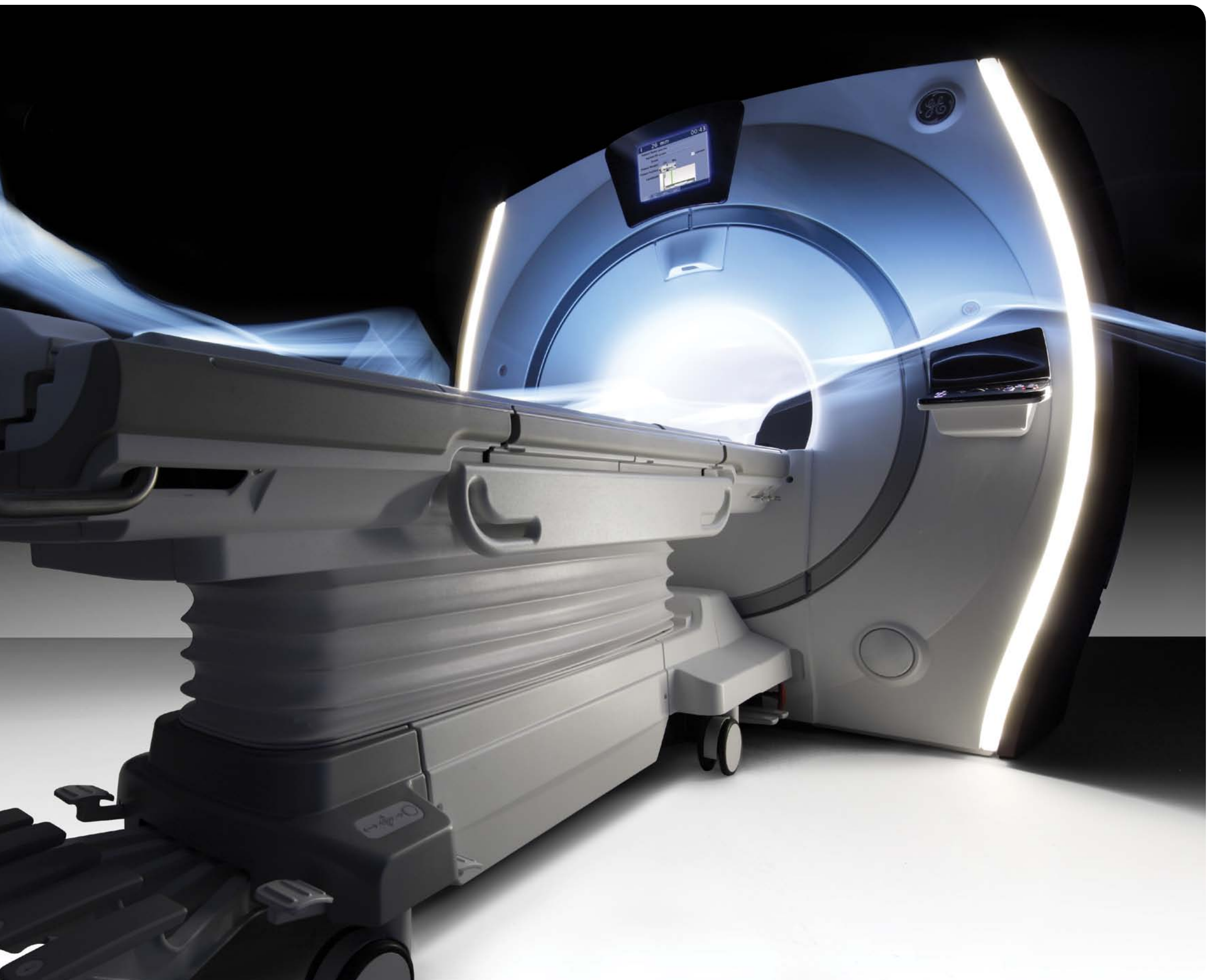
A glowing blue hand, appearing to be made of light or energy, is shown from the top right, holding a pair of dark-rimmed glasses. The background is dark, making the blue glow stand out. The overall aesthetic is futuristic and high-tech.

# “IT STARTS WHERE OTHERS STOP.”

This is what just one MR expert felt when they saw the Discovery MR750w for the first time. It exemplifies our goal to design an MR with as much emotion as technical prowess. This approach has led us to develop one of the most patient and user-friendly MR systems we've ever built.

WHAT WILL YOU FEEL WHEN  
YOU SEE IT FOR THE FIRST TIME?

A close-up of a hand holding a pen, positioned in the bottom right corner of the page. The hand and pen are dark, contrasting with the lighter background.



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## About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our “healthymagination” vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality around the world. Headquartered in the United Kingdom, GE Healthcare is a unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employees are committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at [www.gehealthcare.com](http://www.gehealthcare.com)

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imagination at work