

## 7 Tesla – Providing hope by seeing the previously unseen

Mayo Clinic continues to be a leader in innovation by applying the best technology available to enhance patient care and transform healthcare. One of the latest tools Mayo Clinic experts use is an imaging machine that utilizes a stronger magnetic field to produce more detailed images of the inside of the body.

In this Mayo Clinic Minute, Dr. Justin Cramer, a neuroradiologist, explains how detailed brain scans produced by a 7-Tesla MRI are helping Mayo Clinic care teams diagnose and treat patients with epilepsy and other neurologic diseases.

Justin Cramer, M.D. Talking off camera looking at monitor.	“This is a 7 Tesla MRI here, 3 Tesla MRI here. You can see pretty clearly that there’s a dramatic difference between the two.”
Narrator:	Dr. Justin Cramer a neuroradiologist is describing the latest MRI technology used at Mayo Clinic.
JUSTIN CRAMER, M.D. NEURORADIOLOGY Mayo Clinic	“You can image smaller, like higher spatial resolution, better with lower noise or just faster. You also get better contrast. So the images are more vivid and you can differentiate different structures better.”
Narrator:	That increased image quality gives radiologist an advantage in finding certain brain irregularities.
Justin Cramer, M.D.	“There are several things that 7 Tesla has been really proven to be beneficial for, like epilepsy, multiple sclerosis and vascular imaging.”
Narrator:	This advanced imaging technology, is key to ensuring patients receive an accurate diagnosis to guide treatment.
Justin Cramer, M.D.	“We want to really turn it into a workhorse for all brain imaging, so that any patient who needs a brain MRI could potentially benefit from the increased image quality of 7 Tesla.”

Narrator:

For the Mayo Clinic News Network, I'm  
DeeDee Stiepan.