ABOUT US

Case Western Reserve University has a rich history of pioneering imaging research and translating our discoveries into clinical applications that are revolutionizing patient care. From the first CT-guided biopsies to innovative targeted imaging agents and entirely new imaging paradigms, imaging research at CWRU in collaboration with our clinical affiliates has led to many "firsts" in the field. These innovations are constantly improving patient care by making diagnoses and/or treatments newly possible, more accurate, more comfortable, safer, or less expensive. Our faculty are experts in their fields, making a critical impact in cancer, cardiovascular health, and neurology, as well as rare diseases, ophthalmology, and other areas.

Top strengths include, 1) imaging agents and theranostics; 2) new imaging technologies; and 3) imaging AI. Since 2005, the CWRU Center for Imaging Research has been a nucleus for imaging research and has helped foster numerous collaborations and successful grant proposals, moving discoveries from basic research through clinical trials to translational technologies.

Created by Ariyanto Deni from Noun Project

OUR MISSION
To catalyze and promote revolutionary biomedical imaging innovations that solve clinical and research problems by nurturing our collaborative research ecosystem.

Created by Nithinan Tatah from Noun Project

OUR VISION
To lead the next generation of transformative imaging research that will radically improve disease prevention, diagnosis, and therapy.

Created by lastspark from Noun Project

OUR SCOPE
To be an integrated hub for biomedical imaging research and translation, providing strategic leadership and connecting multi-disciplinary and diverse faculty and trainees.

OUR LONG-TERM GOAL

To improve patient outcomes through

1 Developing accessible and affordable diagnostic imaging technology and image-guided therapies

2 Integrating imaging approaches across modalities and scales

3 Establishing new paradigms that address disease prevention

OUR IMAGING INNOVATIONS ARE IMPACTING HEALTH

01 **LOWER-COST, BETTER ACCESS**
We are building lower-cost, highly accessible diagnostic technologies. Our researchers are creating portable, affordable, and more powerful ways of diagnosing disease. We strive to improve access to key health technology in underserved areas.

02 **REDUCING INVASIVE PROCEDURES**
We are reducing the need for invasive surgical procedures by developing new image-guided treatment strategies that can be done in an outpatient setting.

03 **ELIMINATING UNNECESSARY TREATMENT**
We are eliminating unnecessary treatments by using imaging to grade and stage disease and predict therapy effectiveness noninvasively and sometimes even before the treatment begins.

04 **IMPROVING ACCURACY OF DIAGNOSIS**
We are improving accuracy of disease diagnosis by developing imaging techniques, drugs and imaging agents that are only specific to diseased cells and tissues.

05 **NO HARM TO HEALTHY CELLS**
We are targeting disease without harming healthy cells by using imaging combined with therapies that can be visualized after injection into the body.

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