

Faculty

Faculty

Staff

Faculty Quick Links

- [Brunski »](#)
- [Cooper »](#)
- [Corr »](#)
- [Dai »](#)
- [Dunn »](#)
- [Intes »](#)
- [Ledet »](#)
- [Mehta »](#)
- [Newell »](#)
- [Plopper »](#)
- [Roysam »](#)
- [Spilker »](#)
- [Thompson »](#)
- [Uhl »](#)
- [Vashishth »](#)
- [von Maltzahn »](#)
- [Xu »](#)
- [Yazici »](#)

Related Links

- [Campus Directory»](#)
- [Campus Tour»](#)
- [Directions»](#)

Jonathan C. Newell, Research Professor

RESEARCH

BIO SKETCH

PUBLICATIONS

CONTACT



Research Center Affiliation:

- [Center for Sub-surface Sensing & Imaging»](#)

General Areas of Research:

- Electrical Impedance Imaging
- Biomedical Engineering

Research Activities:

The Electrical Impedance Imaging Project at Rensselaer has developed a series of non-invasive medical imaging devices, Adaptive Current Tomographs (ACT), which create images of a patient based upon the naturally varying conductivity of the body. The ACT instruments use a technique known as impedance imaging. The generated image is a picture of how well electric currents can travel through the subject. Impedance is a technical term describing how easily electric currents are conducted by tissues.