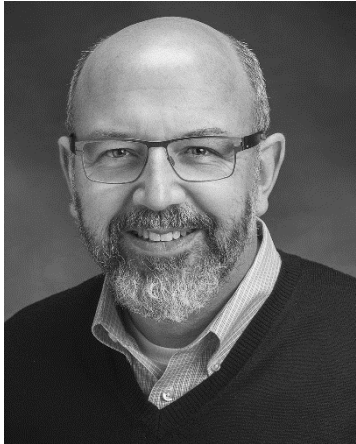


# CHOP Research Institute Summer Scholars Program



**Daniel Licht, M.D.**

Neurology

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**Clinical Research:** Patient-oriented research examining the safety and effectiveness of diagnostics, medicines or medical devices (may involve human subjects or data collected from human subjects)

## Neuromonitoring Critically Ill Infants

Our research is focused on multimodal, non-invasive imaging for neuromonitoring critically ill patients. Infants with critical care needs include the very premature, infants with congenital heart defects, infants with pulmonary hypoplasia and infants on Extracorporeal Membrane Oxygenation (ECMO). These at-risk populations all deserve superior neuromonitoring and protection from harm.

- **Potential summer research project:**
  - (1) Stroke in infants with congenital heart defects;
  - (2) Brain growth in infants with congenital diaphragmatic hernia; and
  - (3) Comparison of optical and Doppler measurements of Cerebral Blood Flow (CBF) in infants.
- **Students will learn the following techniques:**
  - (1) Optical imaging methods and implementation;
  - (2) MRI image analysis (quantitative); and
  - (3) Cerebral sonoelastography.

Please click [here](#) to read more about Dr. Licht