

CHOP Research Institute Summer Scholars Program



Fran Balamuth, M.D., Ph.D., M.S.C.E.

Emergency Medicine

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)

Recognizing Sepsis in the Emergency Department

My research focuses on children in the emergency department with infectious complaints. My main interest is in developing methods to recognize children with sepsis: a potentially life threatening infection that can be challenging to distinguish from benign causes of fever. Techniques include epidemiologic approaches and developing novel genomic based strategies.

- **Potential summer research project:**

Over the past several years we have built and implemented a vital sign based electronic alert for pediatric sepsis. We are continually aiming to revise the alert to improve its sensitivity and specificity. Potential summer projects will revolve around evaluation of both false positive and false negative alerts to improve alert performance.

- **Students will learn the following techniques:**

(1) Medical record review; **(2)** Quality improvement research methods; and **(3)** Basic data analysis skills.

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