

Critical Injury, Inflammation and Sepsis

- **Richard. L. Gamelli, MD. FACS**
- **Department of Surgery**
- **Loyola University Medical Center**

Infection vs Sepsis vs SIRS

- Confusion in terms of Definition

Do Current Definition meet the needs of Burns?

- Clinical Proxies for quality or standard of care

- Antibiotic Rotation

- Selection of Antibiotics for the Rotation

- Gut Decontamination?

Infection

- Early detection
- Ability to predict patients who are at risk
- Assessment of the Severity of Inflammation
- Duration Therapy

When does Inflammation Become Deleterious?

- Does Stratification help?
- Burn Size
- Glycemic Control vs Insulin
- Beta Blockade?
- Oxandrolone?

Consensus on Clinical Problems

- Whether Infection, Sepsis, or SIRS
- Improvements is likely to come from studies;
- Pathophysiology
- Specific Immune parameters
- How do we respond to specific Pathogens

Funding Needs

- New Funding Mechanisms
- Better Collaboration and Linkage with Biotechnology Companies
- New Directions Through New Antibacterials based on Pathogen Response
- Engineering Technology To Predict Outcome In Basic and Clinical Research