



AT THE FOREFRONT

UChicago
Medicine

Microbiome, Liver Transplant, and Hospital Acquired Infection

Christopher Lehmann, MD FAAP

Adult/Pediatric Infectious Disease Fellow

Disclosures

None

Liver Transplant and Hospital Acquired Infection

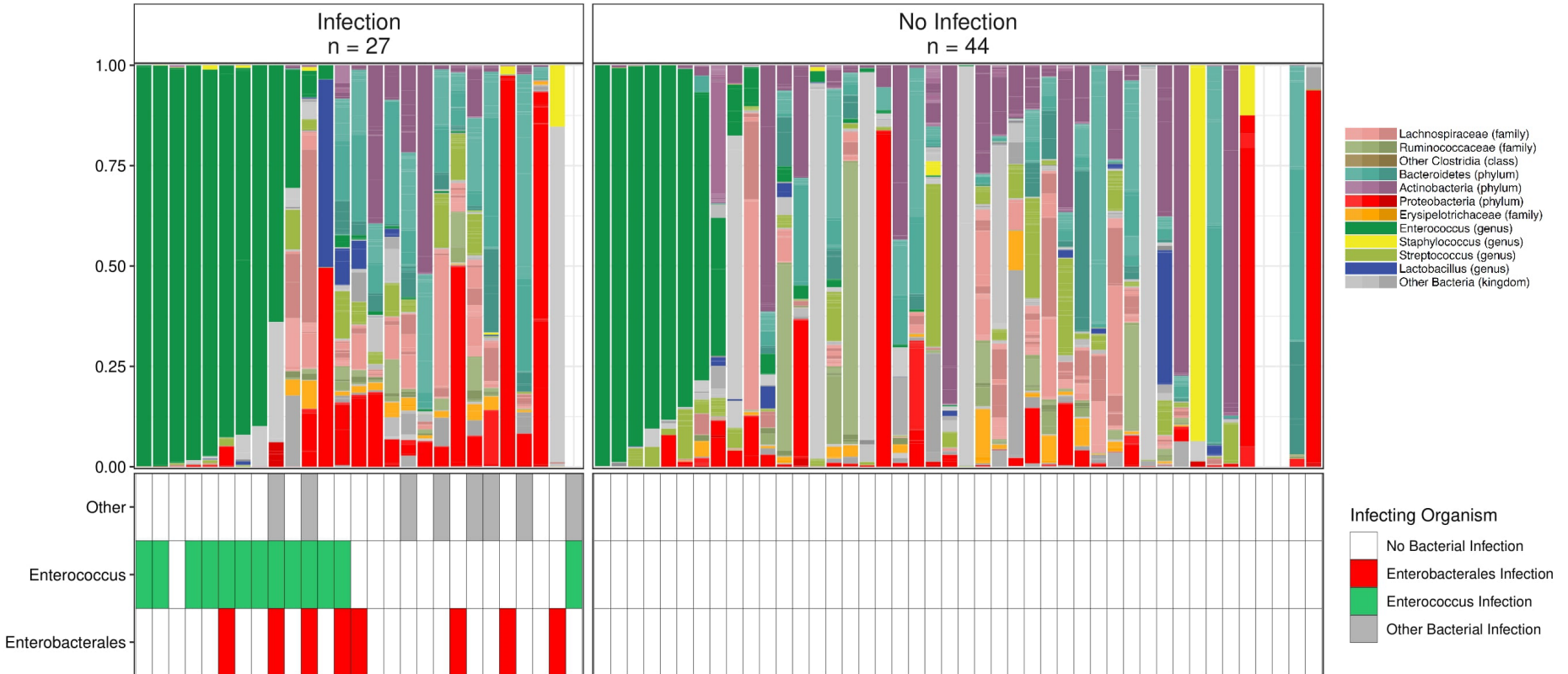
Liver Transplant is the only curative therapy for many diseases

Hospital Acquired Infections in liver transplant

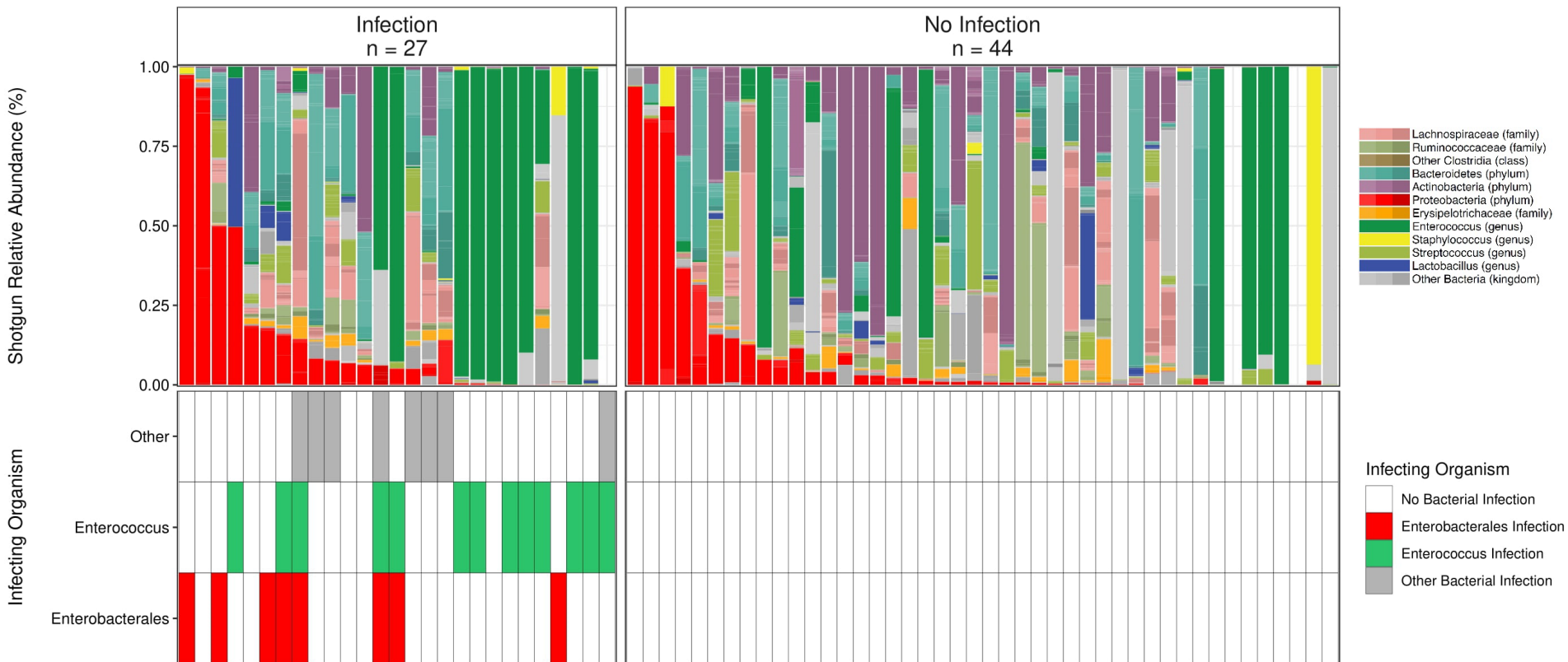
- Frequent: 12-25%
- Morbid: delay discharge, ICU stay, surgery, death
- Linked to the Microbiome

Opportunity to study the microbiome and apply to other patients

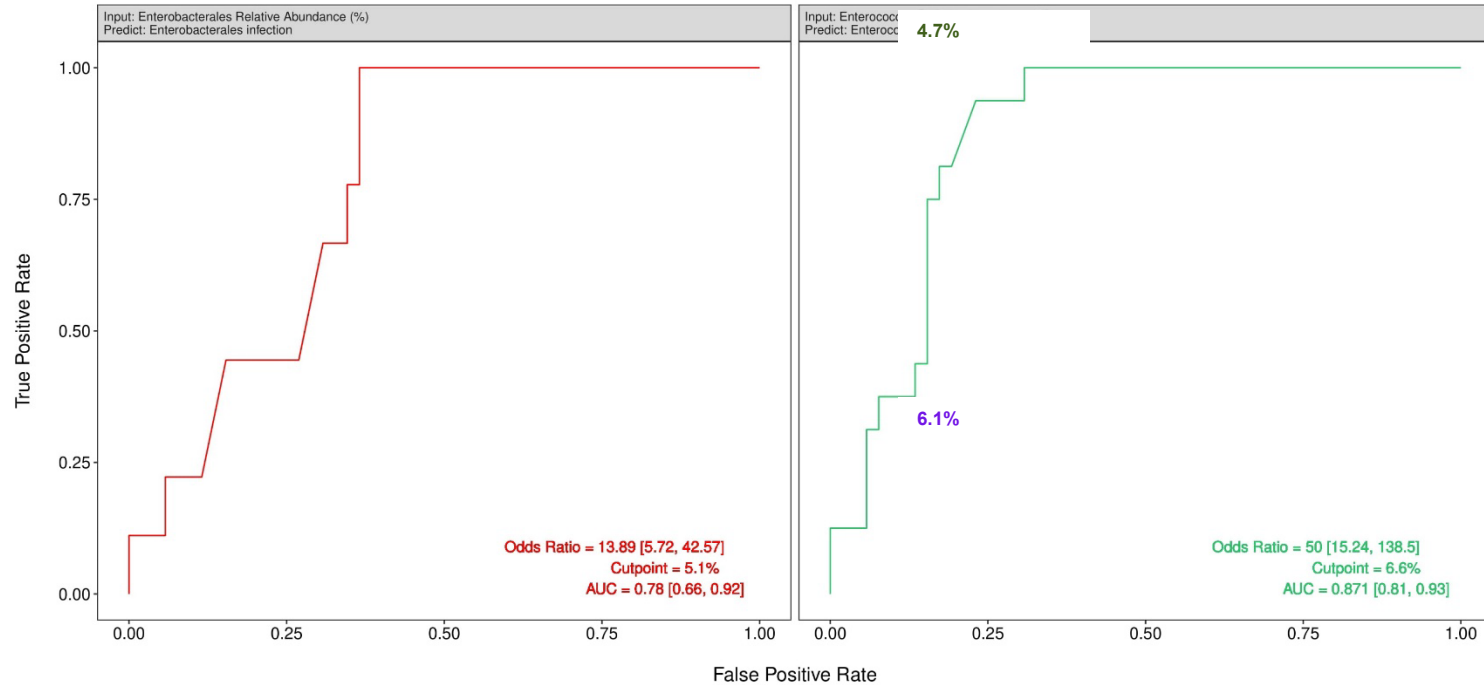
Enterococcus Expansion->Infection



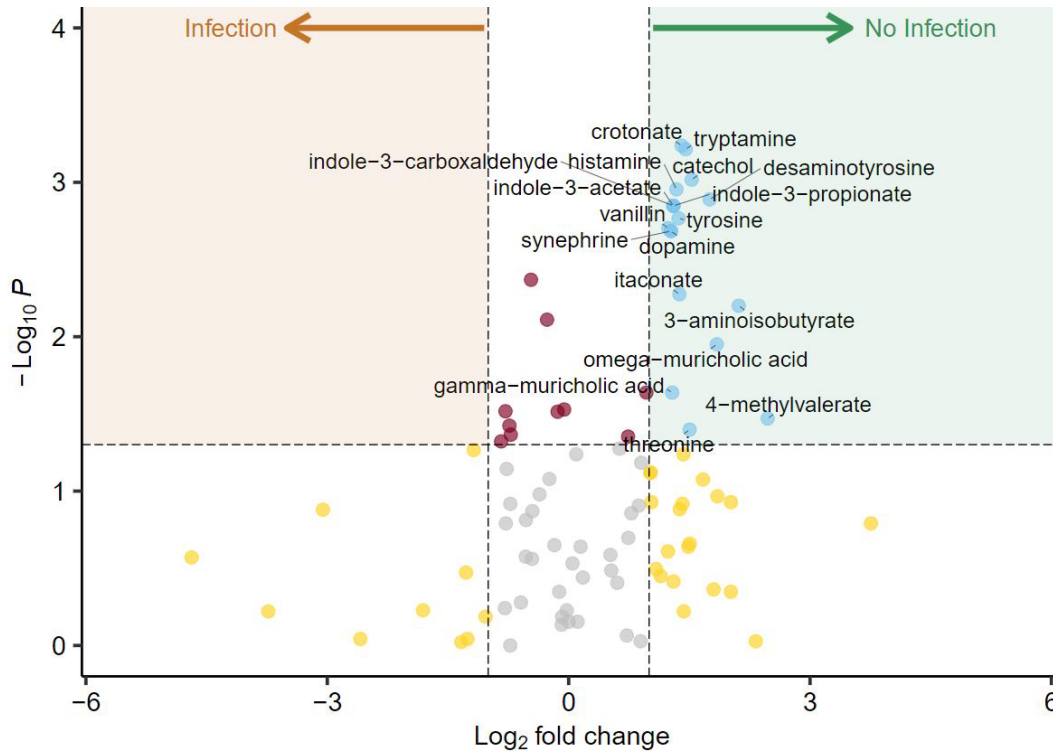
Enterobacteriales Expansion->Infection



Expansion->Infection



Specific metabolites enriched in those without infection



Indole-3-Carboxaldehyde
 Indole-3-Acetate
 Indole-3-Propionate
 Desaminotyrosine
 Tryptamine

Itaconate
 Crotonate
 3-aminoisobutyrate
 4-methylvalerate

Omega-Muricholic Acid
 Gamma-Muricholic Acid

Vanillin
 Synephrine
 Catechol
 Dopamine
 Tyrosine

To control microbiome derived bacterial infections, we must ask:

Who is there?

How many?

What they are doing?

Can we return to normal?

Thanks

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