

International Conference on **PROBIOTICS AND PREBIOTICS**
&
2nd Annual Conference on
MICROBES AND BENEFICIAL MICROBES

October 31 - November 01, 2018 | San Francisco, USA

Novel probiota reducing inflammation in the entire body and persisting in the human intestines at least 60 days

Robert H Schiestl

University of California at Los Angeles, USA

When our lab moved from Harvard to UCLA we found a huge difference in genetic instability and longevity in our Atm deficient mice after 5 years. When we changed the intestinal microbiota back to conventional microbiota we could reproduce the phenotype at Harvard. We tested Atm deficient mice for genotoxicity, genetic instability, DNA damage, inflammation markers, cancer latency and longevity and high throughput sequencing of the intestinal microbiota. Isogenic mice with different microbiota showed a four fold difference in life expectancy, a 4.5 fold difference in genetic instability and DNA damage. The onset of lymphomas was significantly 2.5 fold different. We sequenced the microbiota and found a *Lactobacillus johnsonii* 456 (LBJSupra) strain as dominant bacterial strain in the health beneficial microbiota. Just this bacterium by itself reduced genotoxicity, reduced inflammatory cytokines, induced anti-inflammatory cytokines and significantly reduced levels of cytotoxic T, CD3 and natural killer cells in the spleen, liver and blood. We also found similar differences in Trp53 deficient and even in wildtype mice. The underlying mechanism is due to inflammation promotion or suppression mediated by the intestinal microbiota. We did a clinical trial with this *Lactobacillus* strain that makes a great yogurt. 13 people took it for 7 days and all of them had an increase of *Lactobacilli* in their feces, 7 of them had the same increase after 30 days and 4 of them 60 after days which is unique. This is because it expresses 16 proteins that bind to mucus which is also unique and it binds to human intestinal cells and thus inhibits binding of pathogens like *Salmonella* and pathogenic *E. coli*. It also expresses bacteriocins that kill pathogenic bacteria like *Salmonella* and pathogenic *E. coli* but not beneficial bacteria. LBJsupra is completely resistant up to PH 2 and pepsin, is at 100% viability in yogurt after 250 days in the fridge and can be scaled up for production. Inflammation is involved in most deadly diseases such as heart disease, cancer, neurodegenerative disease, inflammatory bowel disease, ulcerative colitis, Lupus, Crohn's disease, Celiac disease, arteriosclerosis, arthritis, fibrosis, asthma and Diabetes and autism.

Biography

Robert H Schiestl received his PhD from the University of Vienna, Austria at the age of 23. He did Postdoctoral work in Edmonton, Alberta, Rochester NY and Chapel Hill, NC. He was Professor at Harvard with the age of 31 where he stayed for 10 years. Since 18 years he is Professor at UCLA.

rschiestl@mednet.ucla.edu

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