

Periodontitis mouse model : Oral/parodontal microbiota dysbiosis-induced metabolic and immune disorders

Unique proprietary model
evaluating therapies
targeting oral/parodontal
microbiota

Key benefits:

- ✓ A **pharmacologically validated** model to study **parodontal/oral dysbiosis**, associated with **diabetes and insulin resistance**
- ✓ Allows to study **immune mechanisms** involved in **metabolic disorders linked to parodontal/oral dysbiosis**
- ✓ **Predictive model**: similar to human disease where parodontal/oral disease targets **metabolic and immune homeostasis**

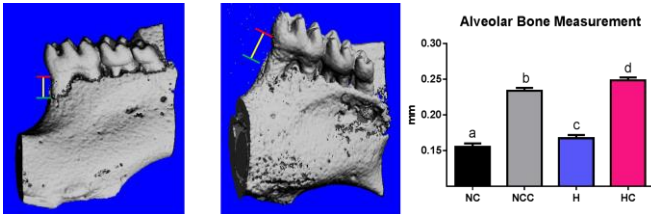
ANIMAL MODEL

- Background strain/gender : C57BL/6J mice, male or female
- Experimental design:

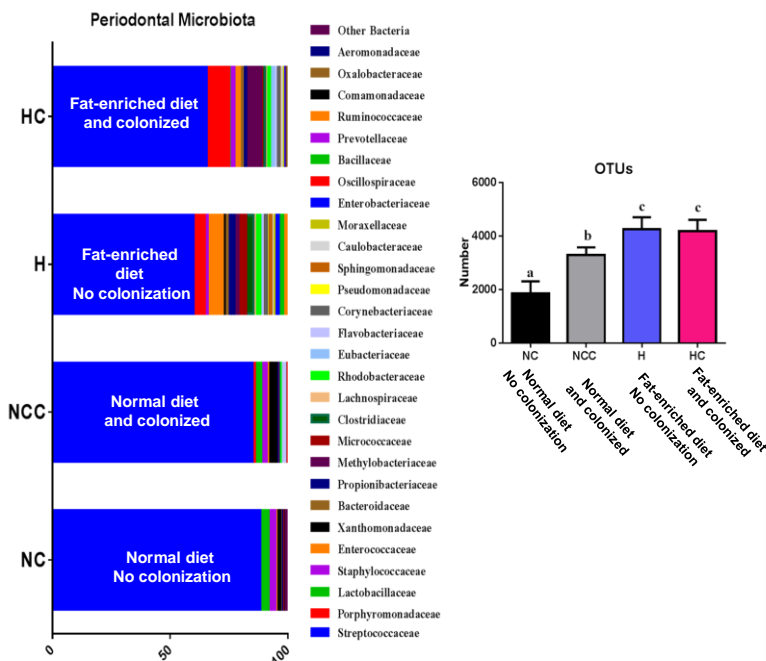


PATHOPHYSIOLOGICAL FEATURES

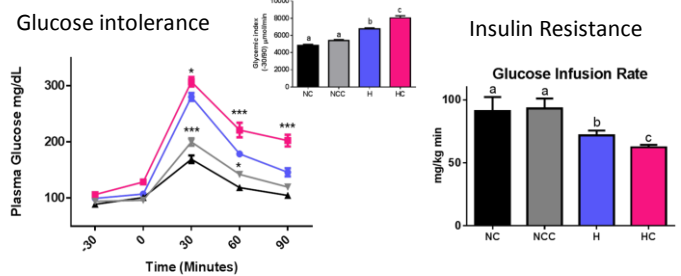
Colonization induced periodontitis



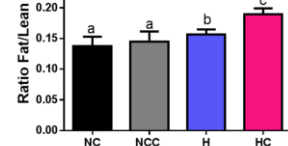
Colonization induced periodontal dysbiosis



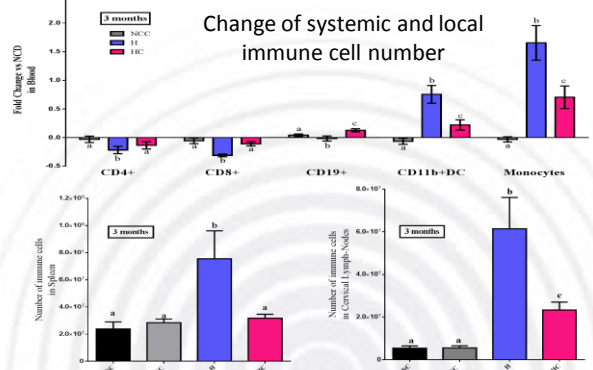
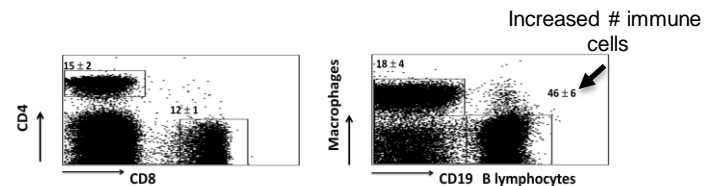
Perioditis-induced metabolic disorders



Change fat mass



Periodontitis-induced systemic and local immune disorders



END-POINTS

- **Anatomopathology** (histology, immunohistology, periodontal inflammation score)
- **Plasma and organ metabolic biomarkers**:
 - Lipids, inflammation, immunoglobulins...
 - Muscle, adipose tissue and liver molecular signaling pathways
 - Periodontium gene (qPCR) expression and protein concentration