#### Periodontitis

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## Introduction

#### Microbiome

- Microbiota: the micro-organisms which live inside & on humans (Turnbaugh et al., 2007)
- Microbiome: about  $10^{13}$  micro-organisms whose which collective genome (Gill et al., 2006)



Figure: Concept of a core human microbiome (Turnbaugh et al., 2007)

#### rRNA

- Ribosomal RNA
- Well-known as a key to phylogeny (Olsen & Woese, 1993)

# Periodontitis (Periodontal disease)

- CAL (Clinical Attachment Loss) & BL (Bone Loss) (Flemmig, 1999)
- Risk Factors (Van Dyke & Dave, 2005)
  - Smoking
  - 2 Diabetes mellitus
  - Genetic factor
  - 4 Host response

### Materials

## 16S rRNA Sequencing

- 100 Healthy people
- 50 Chronic periodontitis Early
- 50 Chronic periodontitis Moderate
- 50 Chronic periodontitis Severe

### Methods

### Results

# Discussion

#### References I

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