### Table a

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### Table b

- **GF vs SPF**
  - WTTg
    - Cell-specific genes: Eosinophil
    - Mucus cell: Mucus cell differentiation
    - Th2 response: House dust mite UP
    - Cell-specific genes: M1 macrophage markers, literature
    - Cell-specific genes: M2 macrophage markers, literature
    - Cell-specific genes: Alveolar macrophage activation, smokers
    - Cell-specific genes: Macrophage
    - Hypoxia: Dendritic cell, hypoxia UP
    - Stress response: Anti-proteases active in bronchopulmonary dysplasia
    - Hypoxia: Dendritic cell hypoxia
    - Epithelial function: Secreted antimicrobials
    - Stress response: Proteases active in bronchopulmonary dysplasia
    - Stress response: Protease balance in bronchopulmonary dysplasia
    - Cell-specific genes: Memory T cell
    - Cell-specific genes: Mast cell
    - Cell-specific genes: Alveolar macrophage activation, smokers, M2
    - Cell-specific genes: Alveolar macrophage activation, smokers, M1
    - Cell-specific genes: Plasma cell

### Table c

- **GF vs SPF**
  - WTTg
    - Behavior
    - Natural killer cell mediated cytotoxicity
    - Response to biotic stimulus
    - Regulation of developmental process
    - Production of molecular mediator of immune response
    - Antigen processing and presentation
    - Cell motility
    - Lymphocyte costimulation
    - Leukocyte activation
    - Regulation of response to stimulus
    - Positive regulation of immune system process
    - Multi-organism cellular process
    - Adhesion to other organism involved in symbiotic interaction
    - Regulation of locomotion
    - Regulation of localization
    - Tolerance induction
    - Negative regulation of developmental process
    - Negative regulation of immune system process
    - Multi-organism process
    - Growth involved in symbiotic interaction
    - Response to other organism
    - Taxis
    - Negative regulation of multi-organism process
    - Immune system process
    - Immune effector process
    - Immune system development
    - Developmental pigmentation
    - Positive regulation of response to stimulus
    - Cell proliferation
    - Positive regulation of developmental process
    - Regulation of immune system process
    - Immune response
    - Negative regulation of locomotion
    - Cell adhesion
    - Localization of cell
    - Negative regulation of reproductive process
    - Response to chemical stimulus
    - Regulation of multi-organism process
    - Movement in environment of other organism
    - Multi-multicellular organism process
    - Interspecies interaction between organisms
    - Biological adhesion
    - T cell selection
    - Regulation of cell killing
    - Positive regulation of cell killing
    - Positive regulation of biological process
    - Positive regulation of locomotion
    - T cell mediated cytotoxicity
    - Protein activation cascade
    - Response to external stimulus
    - Leukocyte homeostasis
    - Multi-organism reproductive process
    - Negative regulation of immune system process
    - Locomotion
    - Cell killing
    - Response to stress
    - Regulation of reproductive process
    - Hormone metabolic process
    - Death
    - Myeloid cell homeostasis
    - Activation of immune response
    - B cell selection
    - Leukocyte migration