

Jl pulmonary

2017-09



University of Michigan
Health System

UMHS-PUHSC JOINT INSTITUTE



Our group:

PKUTH

- Bei He, MD
- Ning Shen, MD
- Wenqi Diao
- Juan Wang, PhD

UM

- Theodore Standiford, MD
- Kathleen A. Stringer, PharmD
- Meilan Han, MD
- Margaret R. Gyetko, MD
- John R. Erb-Downward, PhD



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2016. In UM

UM Pulmonary Critical Care & Respiratory Medicine, Third Hospital, PUHSC



Funding for this collaborative project:
The UMHS-PUHSC Joint Institute
Thank you!

- Analysis of the microbiome in smokers without COPD and with COPD
- Compartmental Analysis of Metabolite Profiles associated with Disease Phenotypes in Chinese and US Smokers with and without COPD



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Outline

- Seminar for pulmonary project in April, 2017, UM
- Training program
- Preliminary results and prospective for metabolomic project
- Progress and summary for microbiome project



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Pulmonary JI seminar

- Pulmonary seminar was held in UM in April, 2017
- Participant:
 - UM: Theodore Standiford, Kathleen A. Stringer,
 - PUHSC: Bei He, Ning Shen and Wenqi Diao
- Symposium contents
 - Progress for metabolomics project
 - Prospective for microbiome project
 - Report of trainee from PUHSC



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Training summary

The NMR Metabolomics Laboratory, UM



- Trainee:
 - Ming Lu, MD
 - Wenqi Diao, PhD student
- Training contents:
 - Clinical work
 - Study extraction of metabolites for serum samples
 - Study how to generate raw data by NMR and handle raw data using chenomx software
 - Study statistical analyses and data visualization
- Study progress:
 - Wenqi and the staff from Stringer Lab performed the preliminary metabolomic analyses in UM.



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Metabolomic project

- Preliminary metabolomics analyses (Done)
 - NS: non-smoker without COPD, n=9
 - HS: healthy current smoker, n=25
 - COPD: ex-smokers with COPD, n=26

- New samples from PUHSC (processing in UM)
 - NS: non-smoker without COPD, n=8
 - HS: healthy current smoker, n=41
 - COPD: ex-smokers with COPD, n=55



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Microbiome project

- Throat samples (Published):
 - The manuscript has been published
- Sputum Samples (Writing):
 - Sputum analyses was basically done
 - The manuscript was being written
- Next Step:
 - Integrated analyses for microbiome of different airway sites

International Journal of COPD

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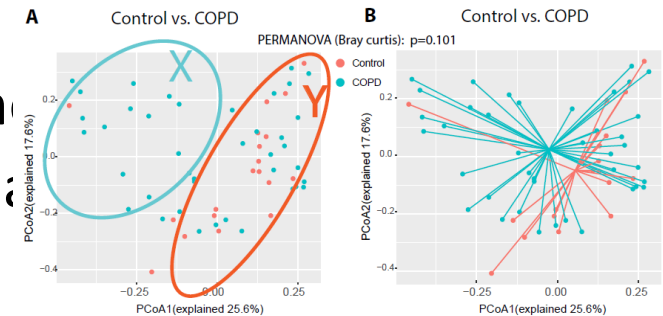
ORIGINAL RESEARCH

Characterization of throat microbial flora in smokers with or without COPD

This article was published in the following Dove Press journal:
International Journal of COPD
4 July 2017
Number of times this article has been viewed

Wenai Diao*

Abstract: The study aimed to determine the relationship between throat microbiome and



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