



- *Assistant Vice President for Academic Affairs for Research Infrastructure*
- *Head, Basic Science Section*
- *Professor*
- *Department of Medicine*
- *Division of Pulmonary, Critical Care & Sleep Medicine*

Conditions Treated:

Research Areas:

- *Airway Epithelial Cell Biology*
- *Respiratory bacterial and viral infections in asthma and COPD*

Programs & Services:

- *Department of Medicine*
- *Division of Pulmonary, Critical Care and Sleep Medicine (Adult)*

Airway epithelial cell host defense functions against bacterial and viral infections in asthma and COPD.

Research Interests

Dr. Chu's laboratory studies the innate immunity of lung cells such as epithelial cells and macrophages in asthma and COPD. Particularly, Dr. Chu focuses on revealing the mechanisms underlying the increased susceptibility to respiratory infections of bacteria and viruses in airways of asthma and COPD patients.

Affiliations with the University of Colorado Denver

Professor, Department of Immunology & Microbiology, University of Colorado Denver

Publications

Zhang W, Case S, Bowler RP, Martin RJ, Jiang D, **Chu HW**. Cigarette smoke modulates PGE2 and host defense against *Moraxella catarrhalis* infection in human airway epithelial cells. *Respirology* 2011;16:508–516. PMID: 21199162

Wu Q, Jiang D, Minor MN, Martin RJ, **Chu HW**. In vivo function of airway epithelial TLR2 in host defense against bacterial infection. *Am J Physiol Lung Cell Mol Physiol* 2011;300:L579–586. PMID: 21239529

Simon GC, Martin RJ, Smith S, Thaikootathil J, Bowler RP, Barenkamp SJ, **Chu HW**. Up-regulation of MUC18 in Airway Epithelial Cells by IL-13: Implications in Bacterial Adherence. *Am J Respir Cell Mol Biol* 2011;44:606–613. PMID: 21239604

Gally F, Di YP, Smith SK, Minor MN, Liu Y, Bratton DL, Frasch SC, Michels NM, Case SR, **Chu HW**. SPLUNC1 promotes lung innate defense against *Mycoplasma pneumoniae* infection in mice. *Am*

J Pathol 2011;178:2159–2167. PMID: 21514430

Case SR, Martin RJ, Jiang D, Minor MN, **Chu HW**. MicroRNA-21 inhibits TLR2 agonist-induced lung inflammation in mice. Exp Lung Res 2011, in press.

Doctor's Contact Information

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Locations

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