

# Jay M. Lee, M.D.



## UCLA Lung Cancer Research Program Thoracic Surgery

### AWARDS/ FUNDING

- NIH/NCI K23
- NIH/NCI K12
- NIH/NCI P50 SPORE CDA
- TSFRE Grant
- STOP Cancer Grant
- UCLA JCCC Grant
- Ronald Binder Memorial Fund for Lung Cancer Research

### SELECTED PUBLICATIONS

Baratelli F, Takedatsu H, Hazra S, Peebles K, Luo J, Batra RK, Sharma S, Dubinett SM, **Lee JM**. Pre-clinical characterization of GMP grade CCL21-gene modified dendritic cells for application in a phase I trial in non-small cell lung cancer. *Journal of Translational Medicine*. 2008 22;6:38.

**Lee JM**, Yanagawa J, Peebles KA, Mao JT, Dubinett SM. Inflammation in Lung Carcinogenesis: New Targets for Lung Cancer Chemoprevention and Treatment. *Critical Reviews in Oncology/Hematology*. 2008;66:208-217.

Yanagawa J, Walser TC, Zhu L, Hong L, Fishbein MC, Mah V, Chia D, Goodglick L, Elashoff DA, Luo J, Magyar C, Dohadwala M, **Lee JM**, St. John MA, Strieter RM, Sharma S, Dubinett SM. Snail promotes CXCR2 ligand-dependent tumor progression in non-small cell lung carcinoma. *Clinical Cancer Research*. 2009 15(22):6820-9.

**Lee JM\***, Baratelli F\*, Hazra S, Lin Y, Walser TC, Schaeue D, Pak PS, Elashoff D, Reckamp K, Zhang L, Fishbein MC, Sharma S, Dubinett SM. PGE<sub>2</sub> contributes to TGF- $\beta$  induced T regulatory cell function in human non-small cell lung cancer. *American Journal of Translational Research*. 2010 2(4):356-367. \*Co-first authors.

Lee G, Gardner BK, Elashoff DA, Purcell CM, Sandha HS, Mao JT, Krysan K, †Dubinett SM, †**Lee JM**. Elevated levels of CXC chemokine connective tissue activating peptide (CTAP)-III in lung cancer patients. *American Journal of Translational Research*. 2011; 3(3):226-233. †Co-senior authors.

**Projects:** Our laboratory effort is divided into three categories:

- 1) Inflammation and immunology in lung carcinogenesis – Intense investigation of dysregulated inflammation (COX-2 pathway) and immunosuppression in lung cancer development to identify potential targets for prevention and treatment of lung cancer.
- 2) Gene therapy / immunotherapy - The application of gene modified dendritic cell (DC) based vaccines to treat lung cancer.
- 3) Clinical trials - The translational application of new drugs and cell based immunotherapy in human clinical trials of lung cancer.
- 4) Biomarker Discovery – Identification of inflammatory protein profiles are applied to clinical prognostic endpoints as biomarkers of early lung cancer detection or recurrence.

**Laboratory Location:** UCLA Lung Cancer Research Program (UCLA / JCCC Factor Building and West Los Angeles VA).

### Laboratory Environment:

The strength of our research program is in its collaborations with other disciplines. The Thoracic Surgical Laboratory is an integral part of the UCLA Lung Cancer Research Program and has an extensive collaboration with Dr. Steven M. Dubinett, the lead investigator of the Lung Cancer SPORE program. UCLA is designated as one of only seven national SPORE programs for lung cancer. There is a wide array of individuals including faculty members (clinical and basic science), post-doctoral and clinical fellows, graduate students, and research technicians in the Program. This laboratory environment is rich in resources and is composed of individuals from multiple disciplines resulting in a situation conducive to maximal learning, collaborations, and productivity.

### Laboratory Techniques:

3-D tissue culture model of lung cancer  
Murine lung cancer models  
Development of targeted drugs, gene modified dendritic cell vaccines  
GMP grade practice  
Tissue culture  
Molecular biology  
Immunology  
Proteomics  
Gene array