Investigator(s):

William A. Groves, Assistant Professor, Preventive Medicine and Environmental Health

Project Title:

Field Analysis of Perchloroethylene in Breath Using a Surface-Acoustic-Wave Microsensor-Based Instrument

Year Funded: 1997

Amount Received: \$15,000

Publications:

Groves WA, Achutan C. Laboratory and Field Evaluation of a Surface Acoustic Wave Microsensor Array for Measuring Perchloroethylene in Breath. In Press, 2004.

Investigator(s):

Gunnar Gudmundsson, Fellow Associate, Pulmonary and Critical Care Medicine; Gary Hunninghake, Professor, Internal Medicine

Project Title: Genetic Determinants of Hypersensitivity Pneumonitis

Year Funded: 1997

Amount Received: \$15,000

Publications:

Gudmundsson G, Hunninghake G. Interferon-gamma is necessary for the expression of hypersensitivity pneumonitis. J Clin Invest, 1997; 99:2386-2390.

Gudmundsson G, Monick MM, Hunninghake GW. Interleukin-12 modulates expression of hypersensitivity pneumonitis. J Immunol 1998; 161:991-999.

Gudmundsson G, Monick M, Hunninghake GW. Viral infection modulates expression of hypersensitivity pneumonitis. J Immunol, 1999; 162:7397-7401.

Gudmundsson G, Hunninghake GW. Respiratory epithelial cells release interleukin-8 in response to a thermophilic bacteria that causes hypersensitivity pneumonitis. Exp Lung Res, 1999; 25:217-228.

Gunnar Gudmundsson. Cytokines in Hypersensitivity Pneumonitis. University of Iceland. Ph.D Thesis, 2000.

Awards:

The Role of DNA in Hypersensitivity Pneumonitis. Icelandic Research Council. \$10,000.

The Role of DNA and IL-12 in Hypersensitivity Pneumonitis. University of Iceland Research Fund. \$12,900.

The Role of DNA and IL-12 in Hypersensitivity Pneumonitis. National University Hospital of Iceland. \$7,200.

Investigator(s):

Joseph M. Reinhardt, Adjunct Assistant Professor, Radiology; Eric A. Hoffman, Professor, Radiology and Biomedical Engineering; Stephen S. Raab, Assistant Professor, Pathology

Project Title:

Accurate Measurement of Intra-Thoracic Airways via X-Ray CT

Year Funded:

1997

Amount Received:

\$15,000

Publications:

Reinhardt JM, Hoffman EA. Quantitative Pulmonary Imaging: Spatial and Temporal Considerations in High Resolution CT. Academic Radiology 1998; 5(8):539-546.

Reinhardt JM, D'Souza ND, Hoffman EA. Accurate Measurement of Intra-Thoracic Airways. IEEE Trans on Medical Imaging 1997; 165(6):820-827.

Reinhardt JM, Raab SA, D'Souza ND, Hoffman EA. Intra-thoracic airway measurement: Ex-vivo validation. Proc SPIE Conf on Medial Imaging 1997; 3033:69-80.

Saba OI, Hoffman EA, Reinhardt JM. Maximizing quantitative accuracy of lung airway lumen and wall measures obtained from X-ray CT imaging. J Appl Physiol. 95(3):1063-75, 2003.

Grant Awards:

CAREER: Program in Pulmonary Imaging. National Science Foundation \$375,000.

Investigator(s):

Mark A. Young, Assistant Professor, Chemistry; Peter S. Thorne, Associate Professor, Preventive Medicine and Environmental Health

Project Title:

Real-Time Chemical Analysis of Single Bioaerosol Particles

Year Funded: 1997

Amount Received: \$15,000