

Materials List for:

Automated Measurement of Pulmonary Emphysema and Small Airway Remodeling in Cigarette Smoke-exposed Mice

Maria E. Laucho-Contreras¹, Katherine L. Taylor¹, Ravi Mahadeva², Steve S. Boukedes³, Caroline A. Owen^{1,4}

Correspondence to: Caroline A. Owen at cowen1@partners.org

URL: https://www.jove.com/video/52236

DOI: doi:10.3791/52236

Materials

Name	Company	Catalog Number	Comments
Whole-body smoke exposure device	Teague Enterprise	TE-10z	Chronic Smoke exposures to induce chronic lung disease in mice
Research Cigarette	University of Kentucky	3R4F reference cigarettes	
Pallflex® Air Monitoring Filters, Emfab Filters TX40HI20WW, 25 mm	Pall Corporation	7219	For measurement of TPMs
25 mm filter holder	Pall Corporation		
Filter sampler	Intermatic	Metal T100	
Gas meter	AEM	Gas meters G1.6; G2.5; G4	
Tracheal Cannula for mouse 18 gauge	Labinvention		Analysis of pulmonary function
Mechanical ventilator	Scireq	FlexiVent	
Gill's hematoxylin solution	Sigma-Aldrich	GSH316	For Gill staining, work under a fume hood
Hematoxylin solution, Harris modified	Sigma-Aldrich	HHS16	
Cytoseal-60	Thermo Scientific	8310-16	
Micro-Slide-Field-Finder	Andwin Scientific INC	50-949-582	For analysis of emphysema
Scion Image Program	Scion Corporation		
Mason's trichrome stain	Sigma-Aldrich	HT15	For analysis of small airway fibrosis
MetaMorp Offline version 7.0	Molecullar Devices LLC	31032	

¹Division of Pulmonary and Critical Care Medicine, Brigham and Women's Hospital - Harvard Medical School

²Department of Respiratory Medicine, University of Cambridge - Addenbrooke's Hospital

 $^{^3\}mathrm{Lung}$ Transplant Program, Brigham and Women's Hospital - Harvard Medical School

⁴COPD and IPF Programs, Lovelace Respiratory Research Institute