

Materials List for:

# Phenotyping Mouse Pulmonary Function *In Vivo* with the Lung Diffusing Capacity

Nathachit Limjunyawong<sup>1</sup>, Jonathan Fallica<sup>1</sup>, Amritha Ramakrishnan<sup>2</sup>, Kausik Datta<sup>3</sup>, Matthew Gabrielson<sup>1</sup>, Maureen Horton<sup>1</sup>, Wayne Mitzner<sup>1</sup>

<sup>1</sup>Department of Environmental Health Sciences, Johns Hopkins University Bloomberg School of Public Health

<sup>2</sup>Department of International Health, Johns Hopkins University Bloomberg School of Public Health

<sup>3</sup>Department of Medicine, Johns Hopkins University School of Medicine

Correspondence to: Wayne Mitzner at [wmitzner@jhsph.edu](mailto:wmitzner@jhsph.edu)

URL: <https://www.jove.com/video/52216>

DOI: [doi:10.3791/52216](https://doi.org/10.3791/52216)

## Materials

Name	Company	Catalog Number	Comments
Gas Chromatograph	Inficon	Micro GC Model 3000A	Agilent makes a comparable model
18 G Luer stub needle	Becton Dickenson		Several other possible vendors
3 ml plastic syringe	Becton Dickenson		Several other possible vendors
Polypropylene gas sample bags	SKC	1 or 2 L capacity works well	Other gas tight bags will work well
Gas tank, 0.3% Ne, 0.3% CO, balance air; (size ME)	Airgas, Inc	Z04 NI785ME3012	This is the standard mixture used for DLCO in humans
25 TCID50/mouse of influenza virus A/PR8 diluted in phosphate buffered saline.			
Porcine pancreatic elastase	Elastin Products, Owensville, MO		5.4 U
Bleomycin	APP Pharmaceuticals, Schaumburg, IL		0.25 U
<i>Escherichia coli</i> LPS	Sigma L2880		3 µg/g body weight; O55:B5
<i>Aspergillus fumigatus</i> (isolate Af293) conidia were collected from mature colonies grown on potato dextrose agar.			