Reducing Ventilation Injury of Lungs

By reducing alveolar surface tension

Carrie E. Perlman, Department of Biomedical Engineering

Surface tension-dependent stress concentrations in flooded alveoli – site of ventilation injury

NIH NRSA

Unique surface tension-determination method – apply Laplace relation to alveolar air-liquid interface

AHA SDG/Stony Wold-Herbert Fund GIA

Discover sulforhodamine B (SRB) improves native surfactant efficacy – lowers surface tension...

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...and, when administered intravenously, improves oxygenation and reduces ventilation injury