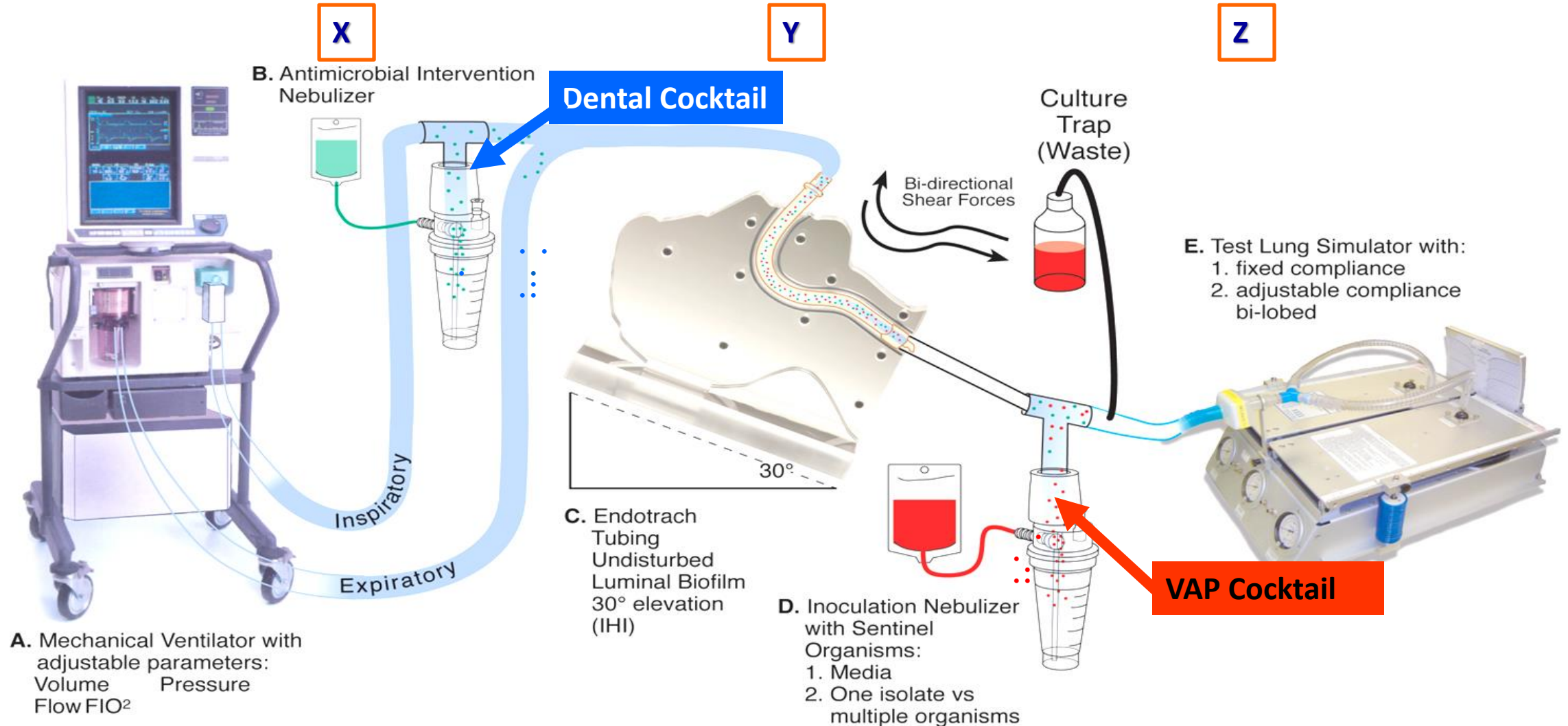
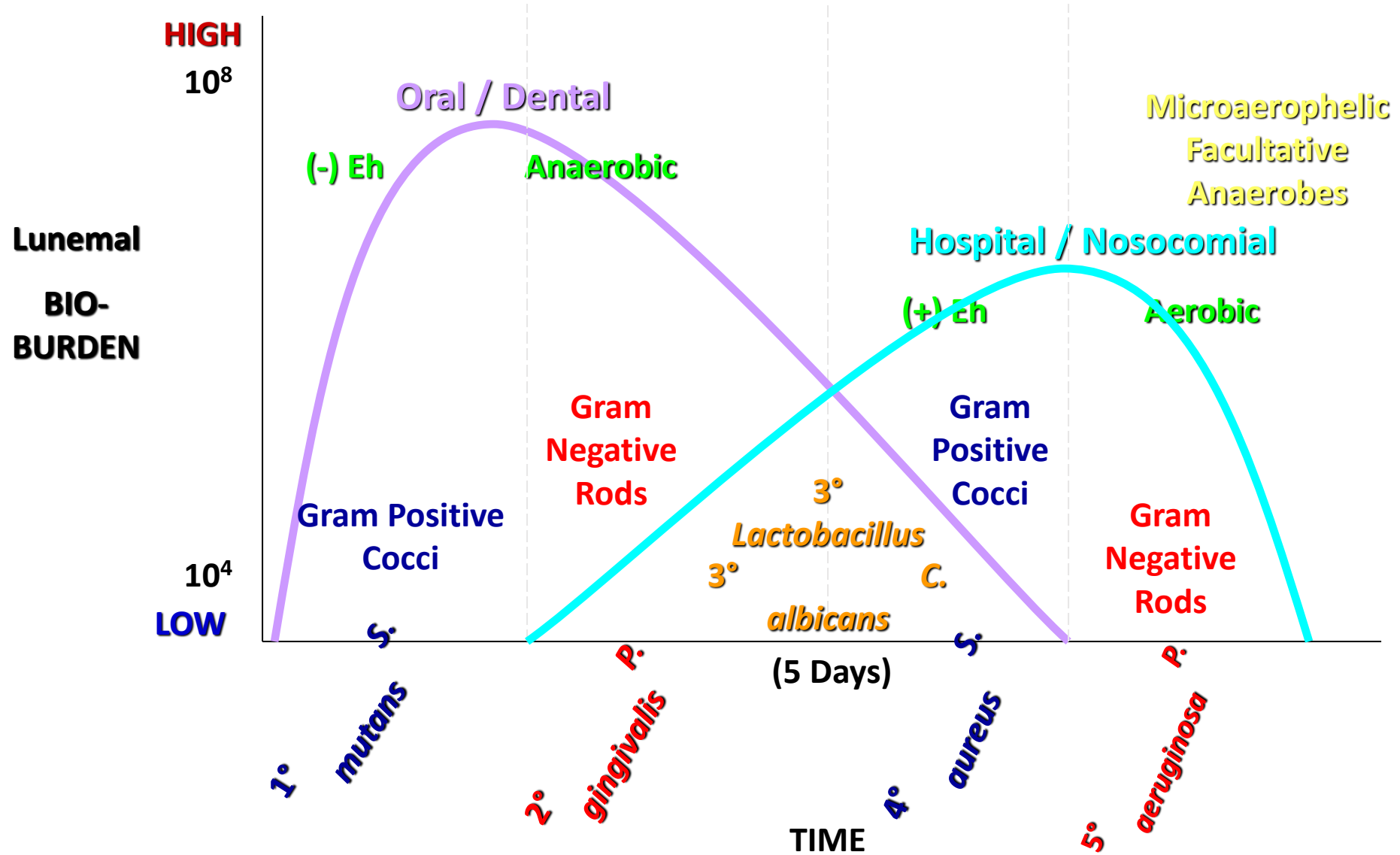


VAP Airway Disease Simulator

Biofilm Development in a Five Part Closed Ventilation Endotrach Model

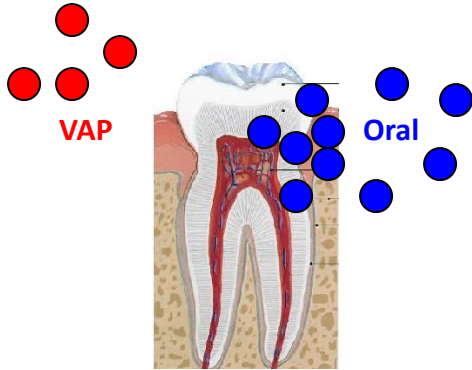


Bi-Phasic Endotrach Colonization

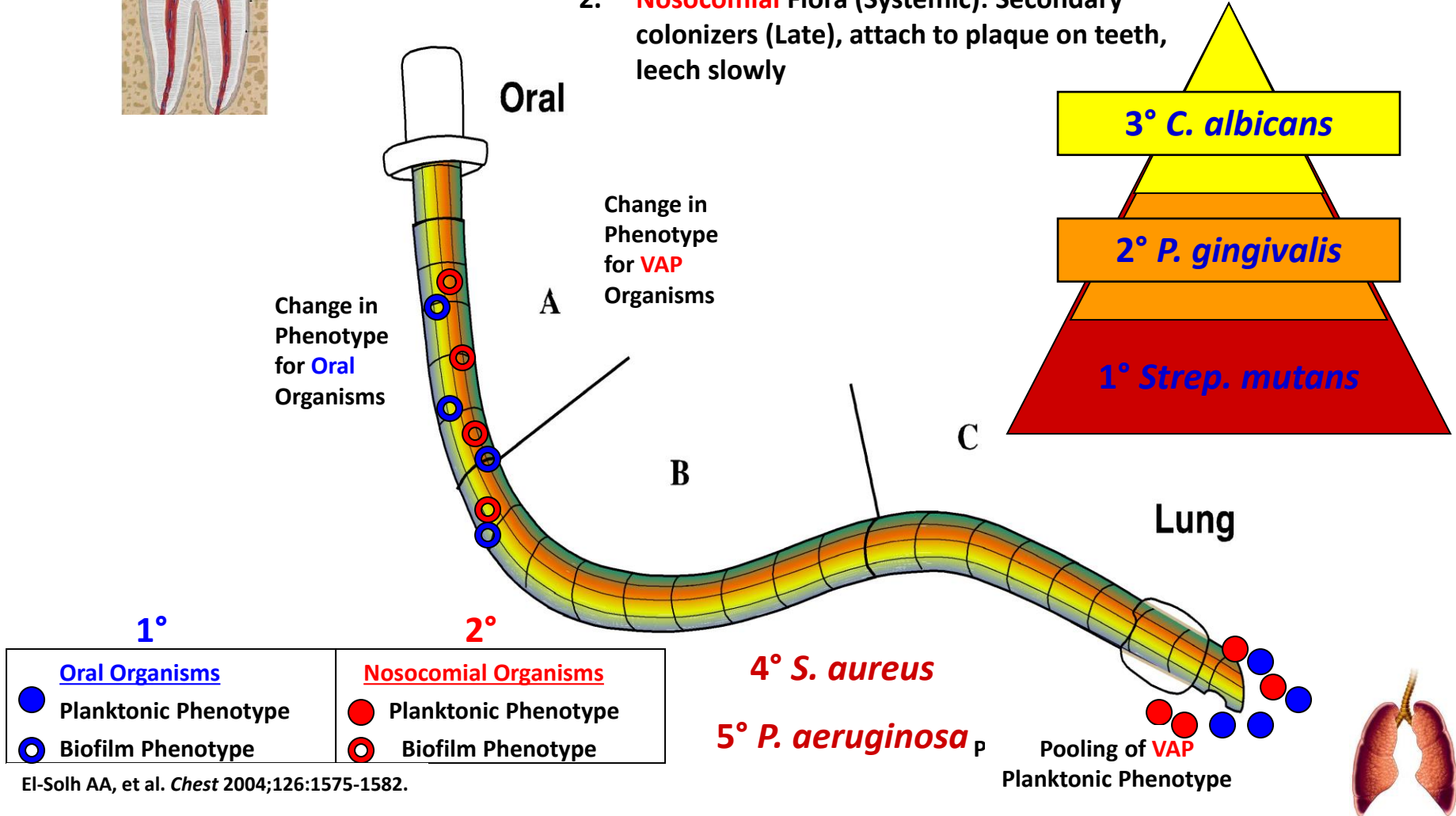


The Bi-Phasic Origin

ORAL → ETT → LUNG



1. **ORAL** Flora (Saliva): Initial or pioneering colonizers (Early)
2. **Nosocomial** Flora (Systemic): Secondary colonizers (Late), attach to plaque on teeth, leech slowly



SHEAR FORCES

Biofilm Assays for Three ETT Sections

