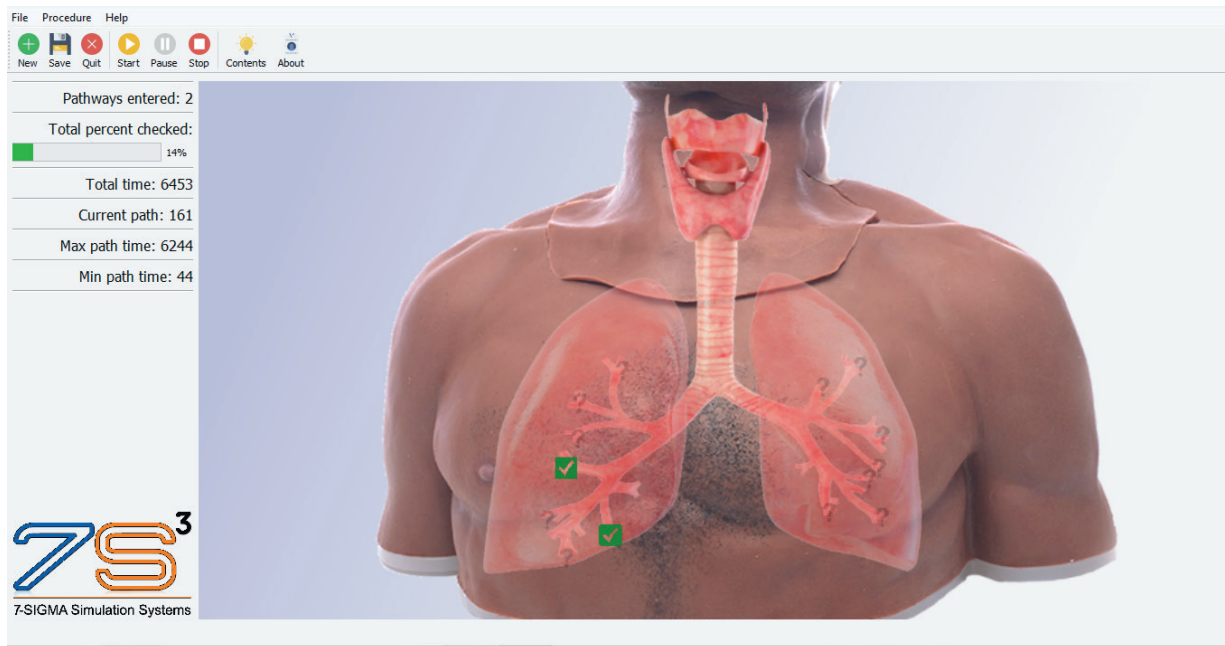


Bronchial Tree Navigation Simulator

7-SIGMA Simulation Systems has developed a high fidelity, realistic, bronchial navigation simulator for bronchoscopy training. The simulation system provides viewing up to 4th generation bronchi, at which sensors are located that confirm the inspection by the student.



Graphical Interface showing the section navigated with check marks indicating successful viewing. VIDEO at www.7-SIGMA/7-s3.com

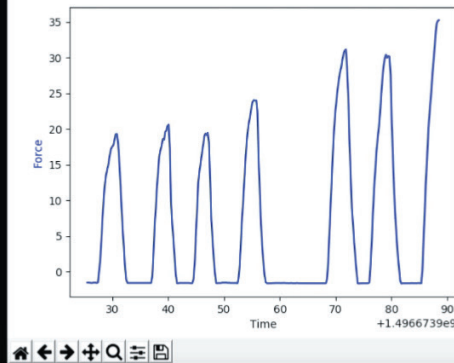
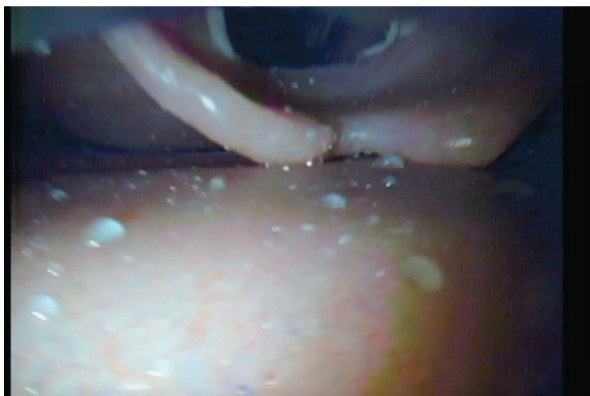
The Graphical User Interface (GUI) displays the bronchial sections that are being navigated, providing check marks that indicate the bronchi that have been successfully viewed. The total time from the start of program to each location checked is saved to a .CSV file.



view of the bronchial lobes

Cricoid Pressure Simulator

7-SIGMA Simulation Systems has developed a high fidelity sensorized cricoid pressure simulation training system that provides immediate graphical feedback of pressure exerted at the cricoid. The system utilizes 7-SIGMA's Conformable Sensor Technology to measure the forces applied. The range of force to open the epiglottis for clear viewing of the vocal chords is about 25 Newtons. The force to close the esophagus is 30-35 Newtons. The Graphical User Interface (GUI) displays the force, in Newtons, presented against a "yellow/green/red" background that indicates "too little/correct/ excessive" pressure. The file is saved to a .CSV file.



Forces are in Newtons. Literature states the force required to assist in intubation is 20N. The force to close the esophagus is 35N.

