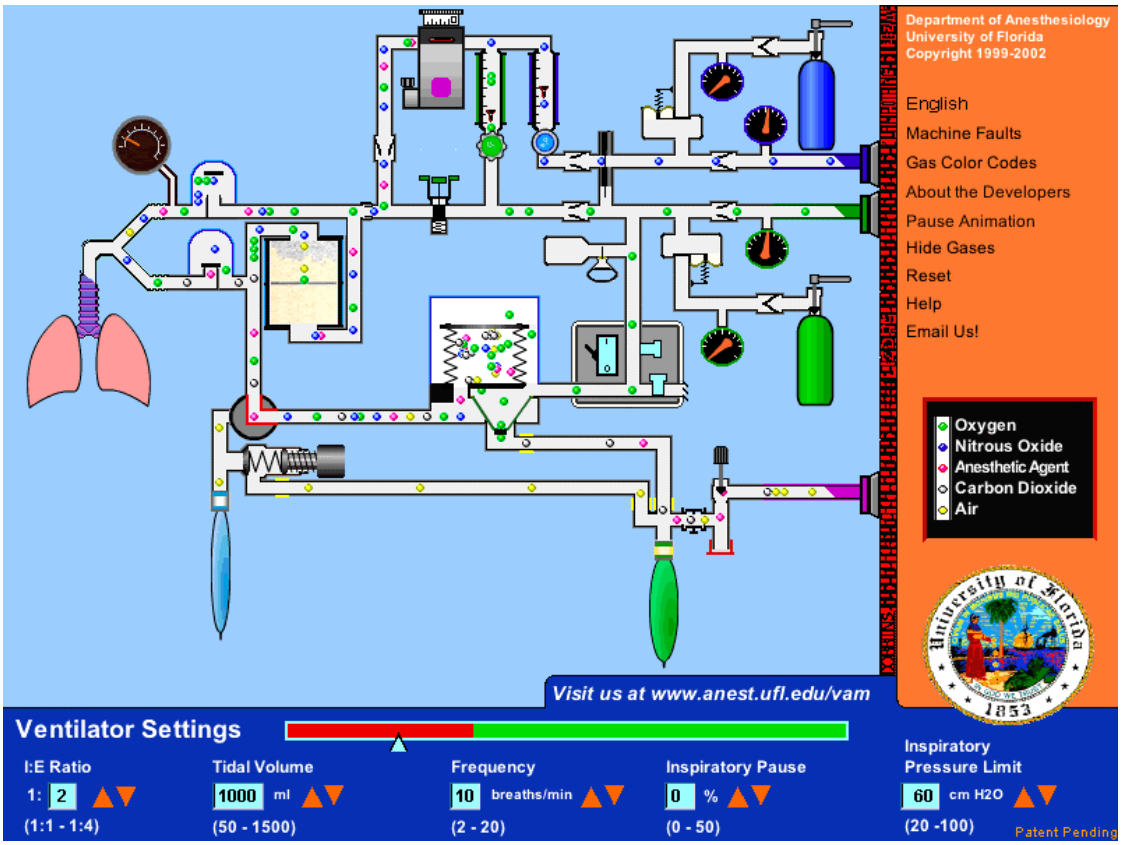
The Virtual Anesthesia Machine

Educational sponsor: APSF (Anesthesia Patient Safety Foundation)

At the Virtual Anesthesia Machine (VAM) web site: http://www.anest.ufl.edu/vam, you will find tutorials and other material that you can access, including fault algorithms, pre-use checklists and a newly-released APSF workbook, a bulletin board open to all parties to discuss anesthesia equipment issues, and an interactive, real-time simulation of gas flows in a generic, traditional anesthesia machine. The APSF workbook contains self-paced structured exercises related to traditional anesthesia machines.

Instead of complex drawings of anesthesia machines, VAM presents a simplified mental model designed to help viewers appreciate and retain basic concepts. Gas "molecules" are made visible and are color-coded (US/ISO gas color codes). Users can adjust 30 controls and observe in real time the essential effects of their interventions on gas pressures, flows, compositions and volumes (lung, bellows and manual and scavenging bags). Machine faults can be simulated. The simulation can be paused. Gas molecules can be made invisible. An animated tutorial provides on-line help to use the simulation. The simulation features Arabic, Chinese, Dutch, English, French, German, Italian, Korean, Russian, Spanish or Turkish legends.



All materials on the VAM web site, including the simulation and APSF workbook, are accessed **free of charge**. To keep costs low, the materials are made available only via the Web. Macromedia Shockwave (a free download, if not already pre-installed on a new PC) is required to view the simulation from the Web. Upon first use, user registration is required. Registration data are not shared with third parties but are used to inform users of web site updates and tailor future developments based on broad user demographics. Registration is not required upon subsequent use on a PC that allows a VAM "cookie" to be deposited. Instructions for off-line use at teaching locations without Web access are provided at the VAM web site. Please address questions and comments to: Sem Lampotang, Ph.D., Associate Prof. of Anesthesiology, Box 100254, JHMHC, Univ. of Florida, Gainesville, FL 32610-0254, USA. Email: sem@anest4.anest.ufl.edu