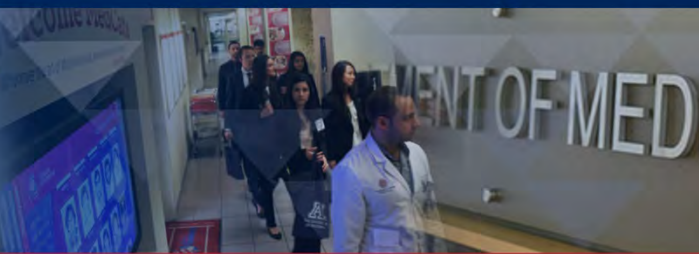
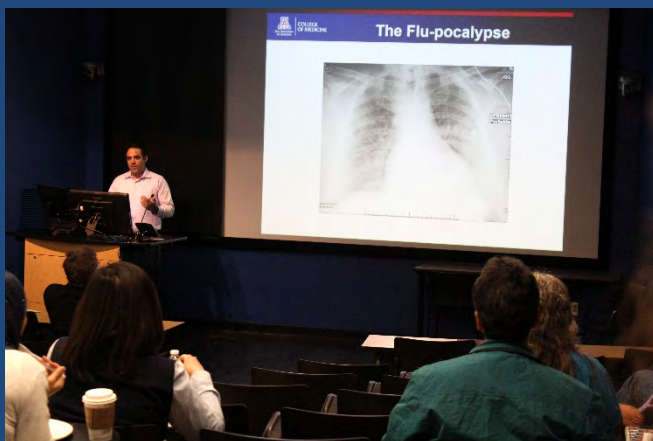




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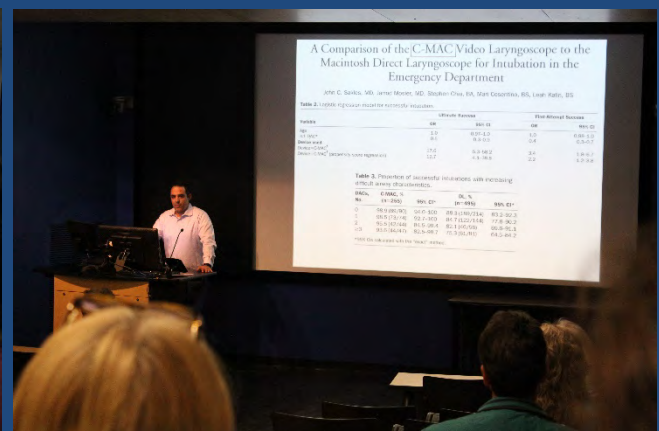
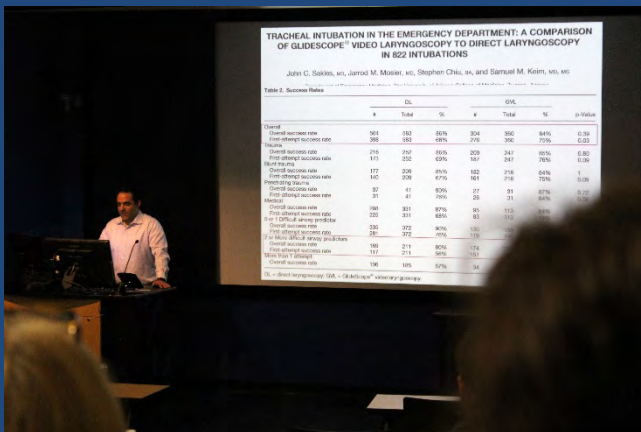


DOM Research Seminar with Drs. Jarrod Mosier and Steve Black – Feb. 8, 2018

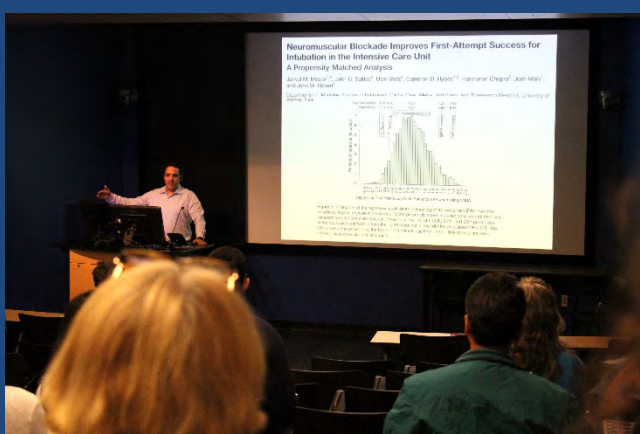
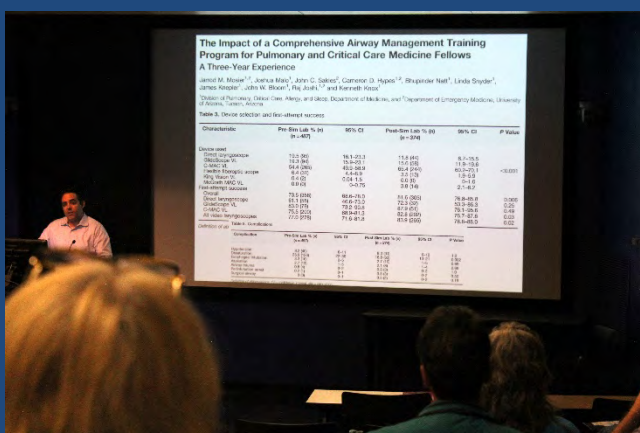
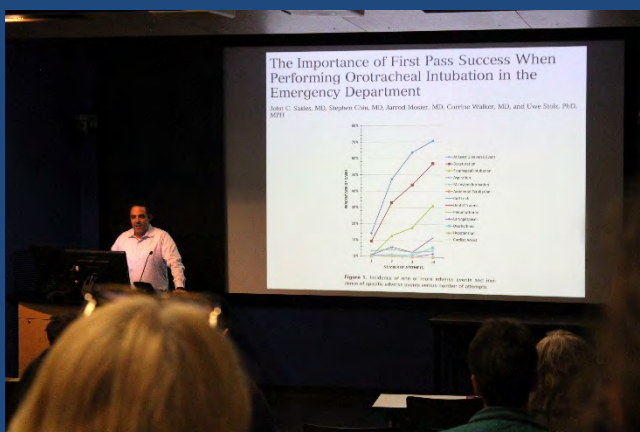
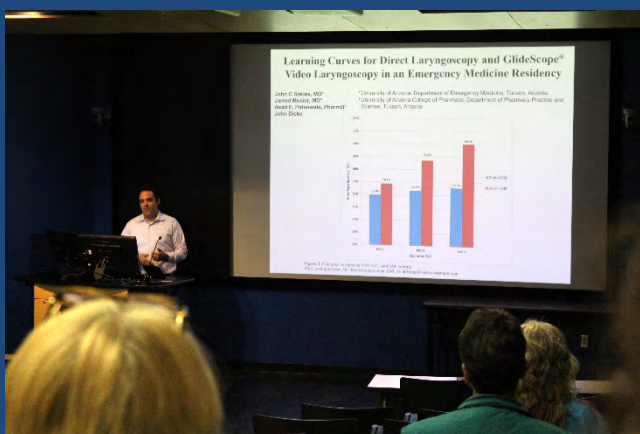


UA Department of Emergency Medicine's **Jarrod M. Mosier, MD**, also associate program director, DOM Critical Care Fellowship, spoke on "Translating Research to a Life Saved" and **Stephen M. Black, PhD**, with the Division of Transla-tional & Regenerative Medicine, discussed "Metabolic Reprogramming in Pulmonary Hypertension."





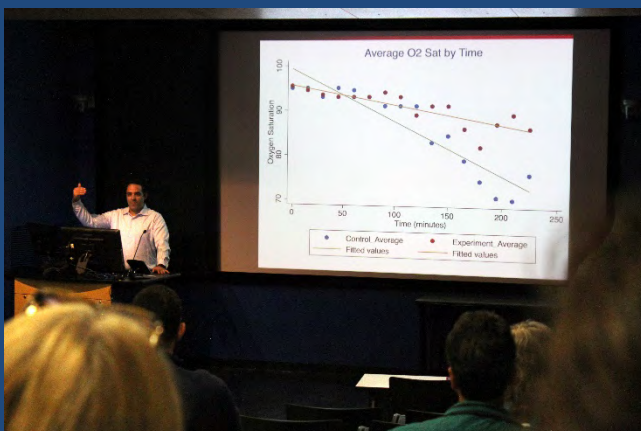
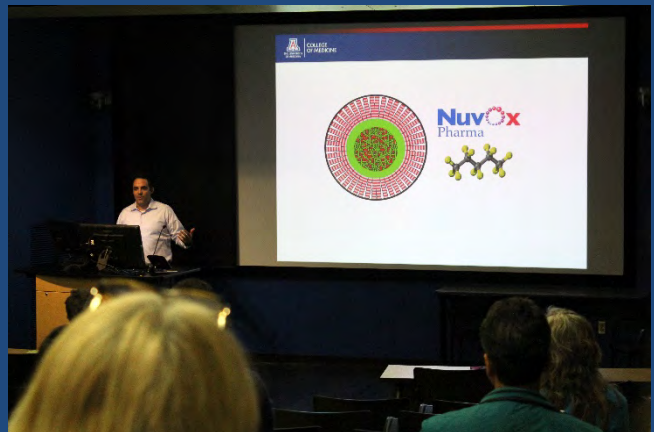
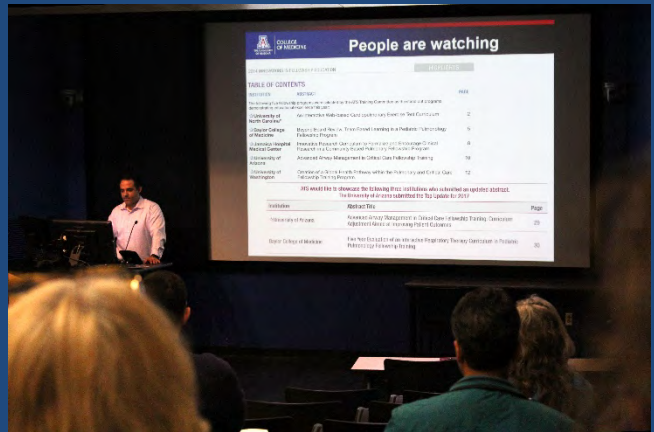
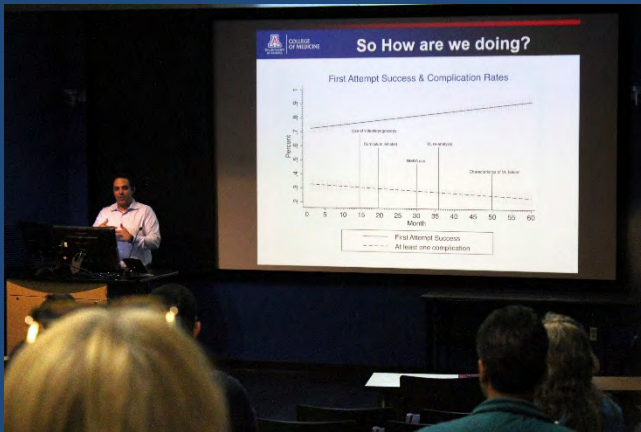
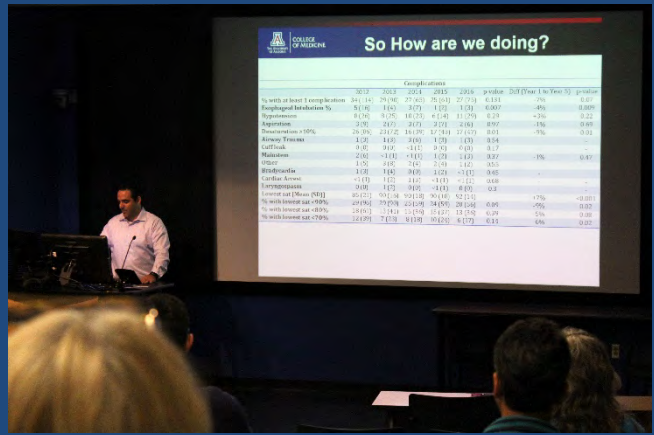








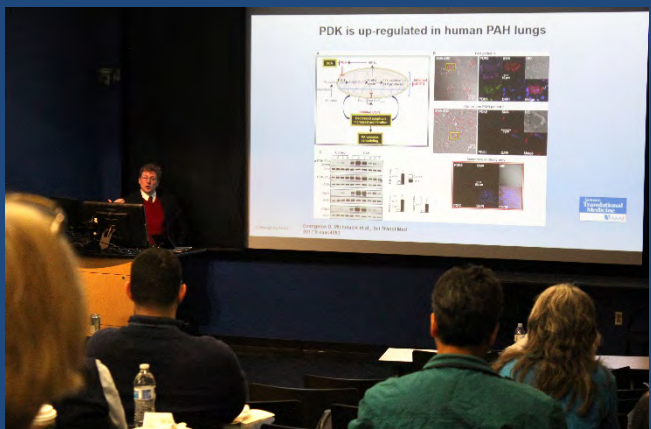
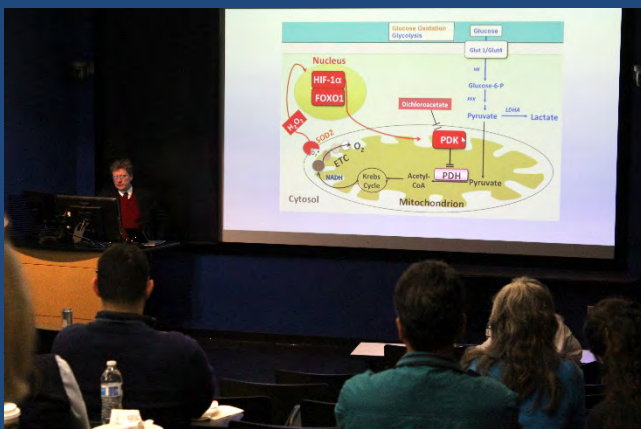
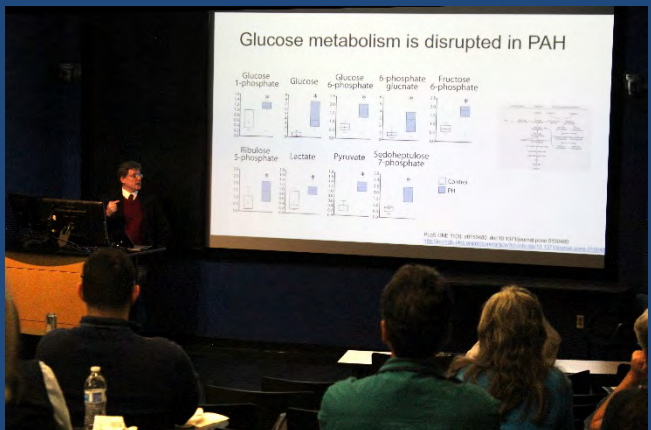
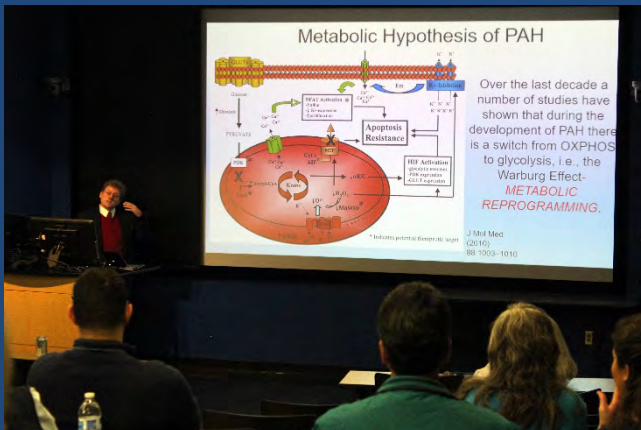
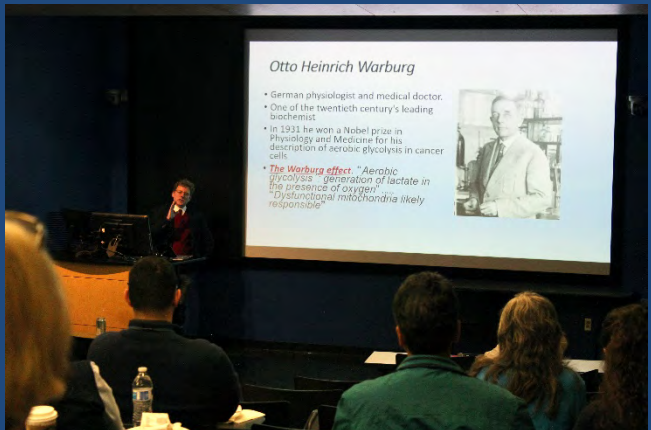
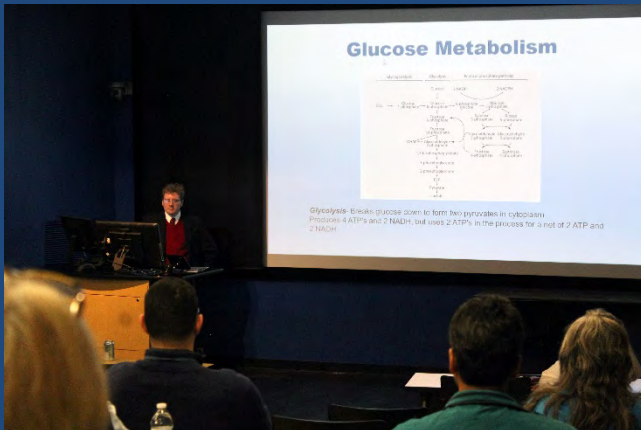




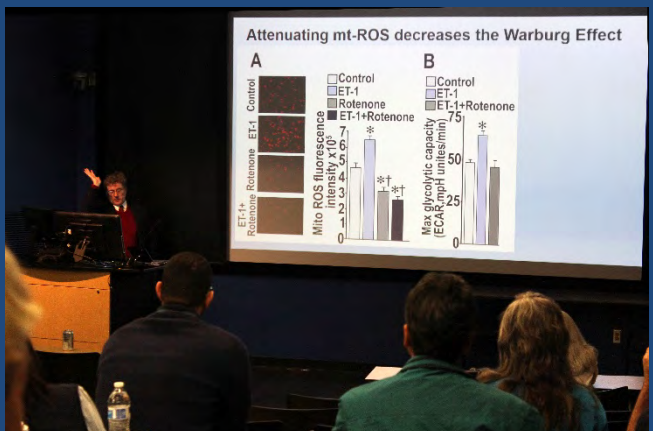
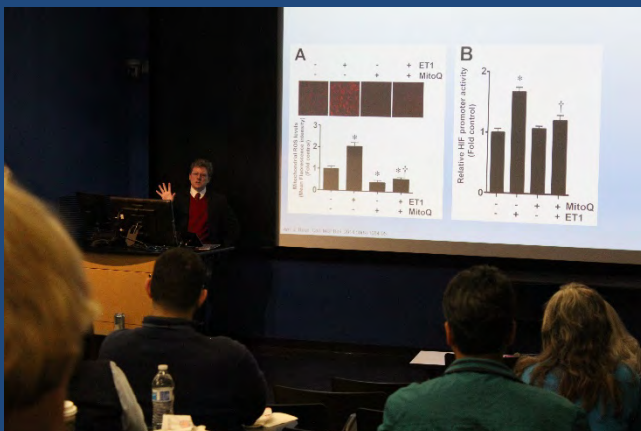
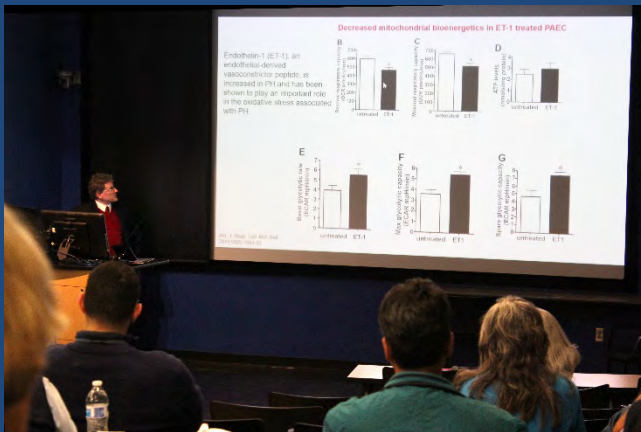
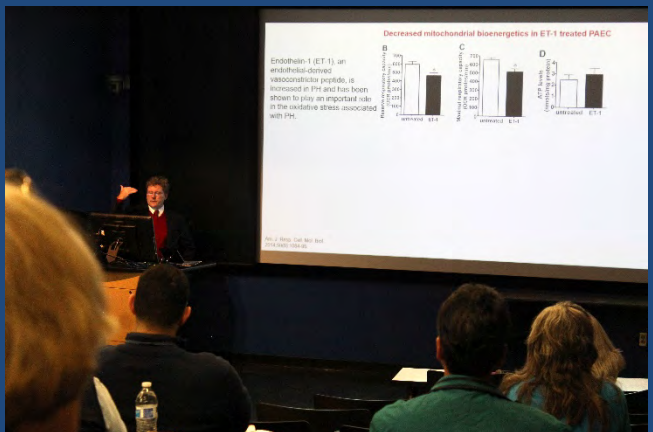




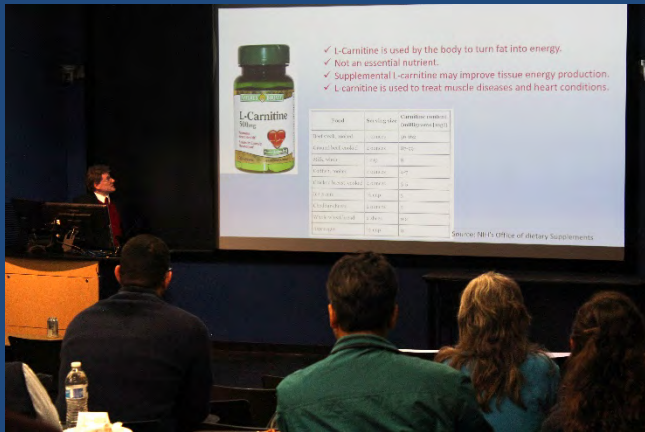
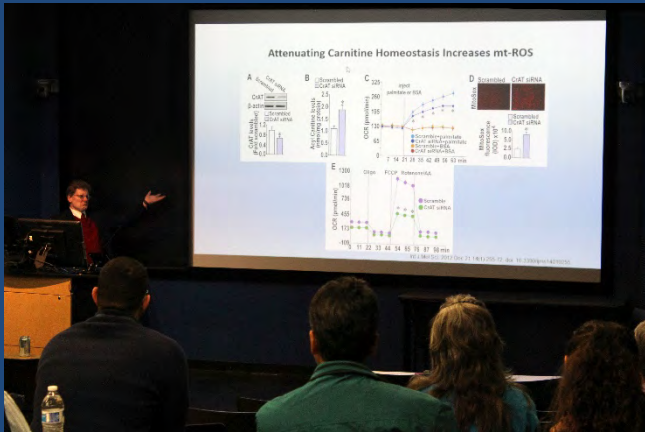
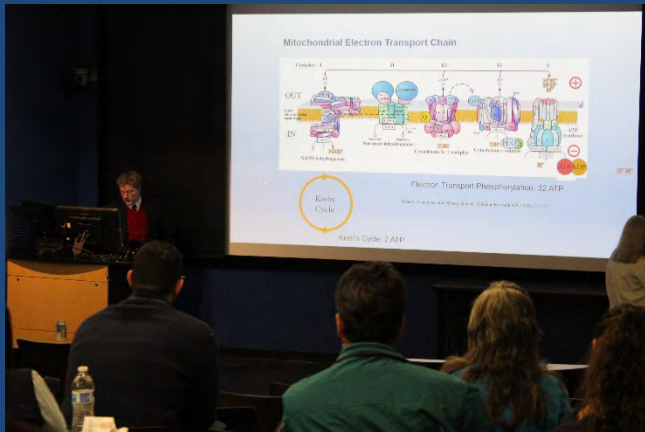
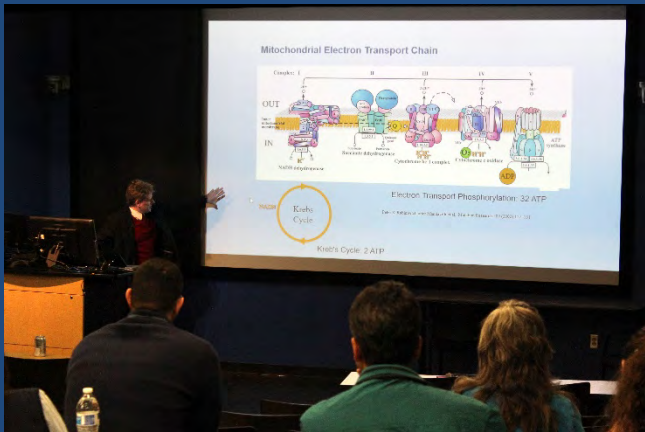
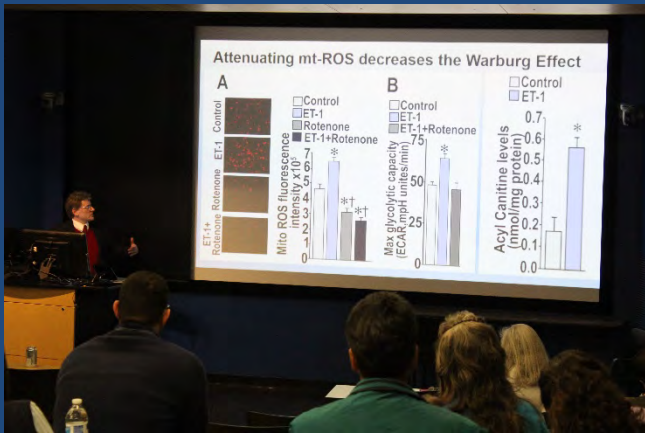




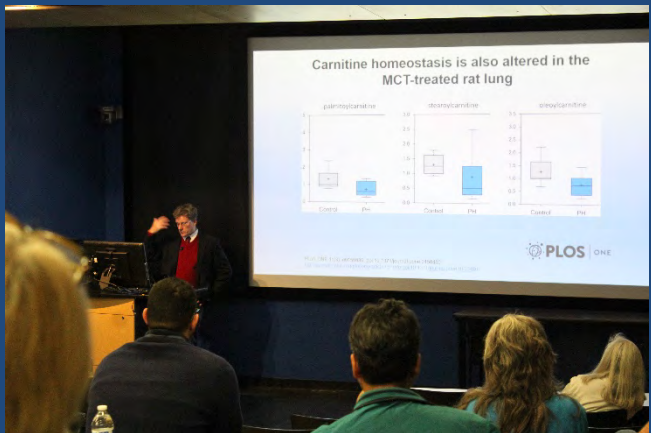
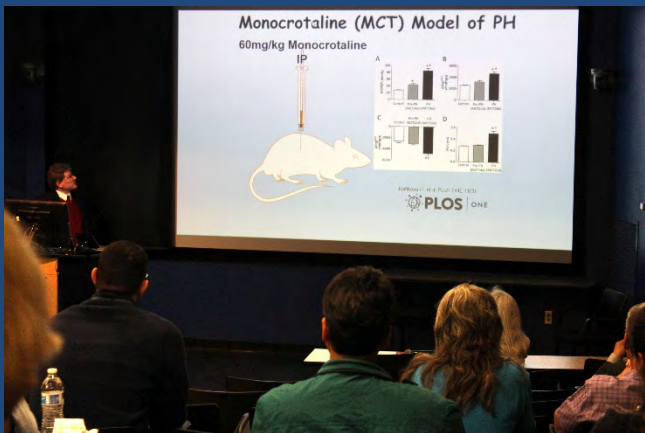
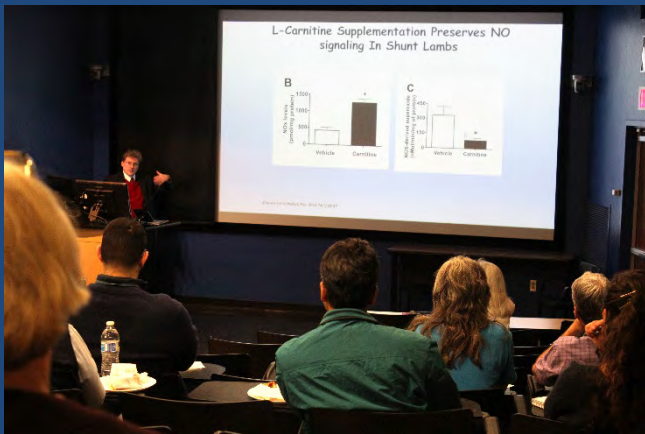
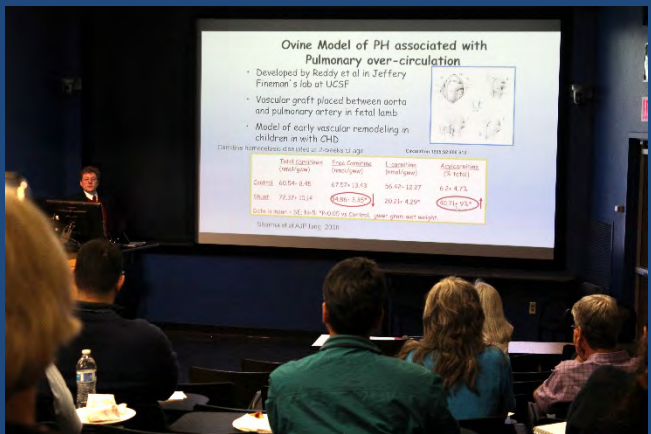
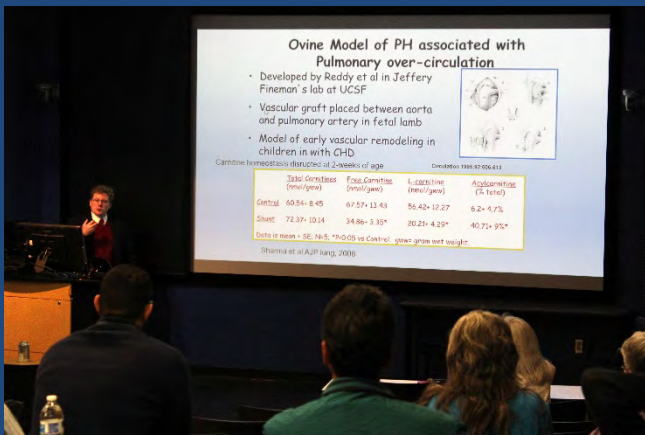




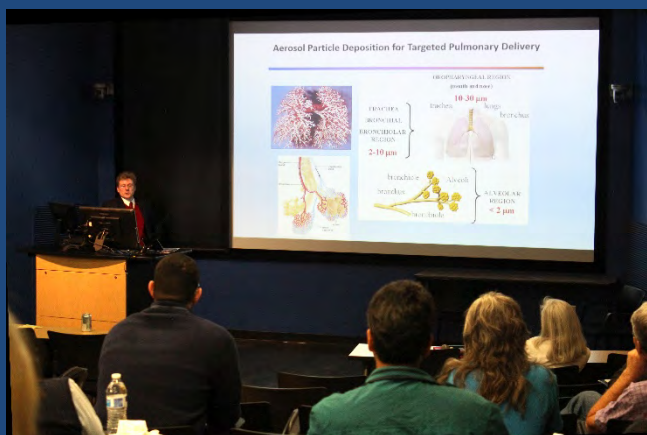




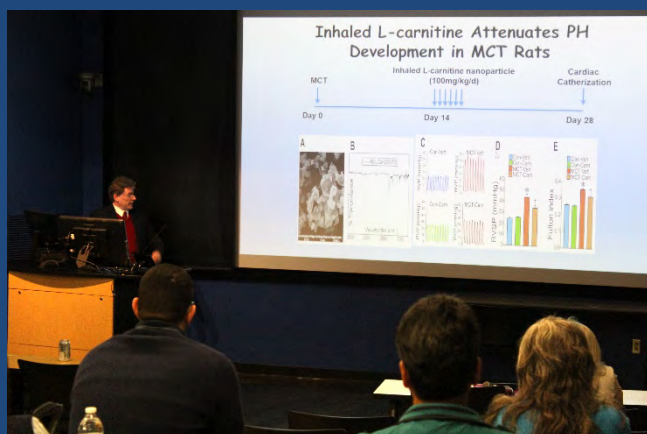












- ### Conclusions
- Current therapies for PAH are focused on increasing PV relaxation and do not reverse disease progression.
  - Like cancer, PAH appears to be a disease of metabolism and is associated with changes in glycolysis and OXPHOS.
  - Inhibiting the glycolytic enzyme, PDK-1 with DCA reduces PAH development in certain PAH cases.
  - Our approach is to reduce the activation of HIF-1 $\alpha$  signaling required for the glycolytic reprogramming in PAH.
  - mt-ROS increase HIF-1 $\alpha$  signaling in PAH.
  - Restoring carnitine homeostasis reduces mt-ROS generation.
  - L-carnitine supplementation preserves NO signaling and endothelial function in early forms of PH.
  - L-carnitine supplementation prevents the development of more advanced forms of PH.





Archived video of the Feb. 8, 2018, DOM Research Seminar can be viewed [here](#).  
Photos courtesy of David Mogollón, Communications Coordinator, UA Department of  
Medicine, (520) 626-1137 or [dmogollon@deptofmed.arizona.edu](mailto:dmogollon@deptofmed.arizona.edu)